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Expulsion the Remedy.

Superintendent Standard and the Salary Schedule

V. H. Culp, Tripp, S. D.

It is often an unfortunate circumstance that a school fight results in a low mortality rate, and that the first and only victim is too frequently the superintendent. It is a case where the gods of battle are on the side of the heaviest battalions. The weapons are no less dangerous, because they are composed of such immaterial things as personal prejudices, self aggrandizement, and the deadly poison gas of politics. There are no gas masks in existence that are impervious to political gas; sometimes it kills suddenly, then, again, the victim lingers on for a spell; but, it always results fatally. Sometimes the victim protects himself with the weapon called compromise; but, generally, this is only postponing the final denouement. It is such a battle that I wish to relate.

Superintendent Standard had, for days, been quietly fortifying himself for the inevitable fight. During five years of hard, patient work as superintendent of schools, at Blunderborough, he had built up a corps of efficient teachers, and his school was becoming noted throughout the states as an example of educational efficiency.

But, just as it requires oil to make a motor run smoothly, so it requires money—good hard coin of the republic—to make a school run smoothly. This is one of the cold, hard, worldly facts of which some school boards are not aware. And, whenever there is talk of retrenchment, the first place considered for applying the pruning knife is the school system. It has been charged that the president of a school board was willing to pay more for a competent jockey to train his favorite racing horse, than he was to pay an even more competent teacher to train his children. This is possibly because the sire of the race horse was a thoroughbred.

Thus, it was perfectly natural that not a member of the school board of Blunderborough was cognizant of Superintendent Standard's formula of hiring only teachers of broad training and successful experience.

During Superintendent Standard's incumbency vacancies had been few; but, salaries had been going up in the state to meet the increased cost of living; and the superintendent knew that, if he were to keep his present efficient force of teachers, salaries would have to be raised. The old problem, never successfully solved, of how to secure a first rate teacher at a third rate salary, was now to the fore. With this question to be threshed out, the meeting (or shall we call it a fight) was called for eight o'clock one early spring evening. The board was on one side and the lone superintendent on the other.

But, Superintendent Standard never went into a fight unarmed. He carried with him what he believed to be an adequate salary schedule, based on the post-war increased cost of living, and comparable with salaries paid to teachers in towns of equal size in the surrounding territory. He opened the fight by laying the schedule before the board with the remark that he believed it fair and adequate, and that it was the only method by which successful teachers could be obtained and held in the schools of Blunderborough. This opening gun was promptly answered by President Gallin of the board by a few small calibre shots to the following effect: "This district has got to retrench. Everyone is hollering about high taxes. We have already gone in about as deep as we dare. With the new pavement on Rust Street, and the new traffic signals about town, and other expenses which must be met; I tell you, we simply have got to retrench."

"Yes," put in Welch, another member of the board, "there is a new amusement park and race track that the Chamber of Commerce is strongly advocating. It would never do to antagonize the Chamber of Commerce when they are so set on putting our city on the map."

"I still think," replied Superintendent Standard, "that a first class school system, the like of which we have had for five years, will put us on the map to a greater advantage than an amusement park and a fine race track. Unless we raise the salaries to make them on a par with towns of about the size of Blunderborough, most members of the present faculty will resign and go elsewhere for higher salaries."

"Let 'em resign," shouted Mr. Weis, who owned the largest factory in town, and was thoroughly accustomed to hiring and firing common labor. However, the efficient foremen and really skilful workmen, that Mr. Weis employed, were kept content with six-cylinder salaries. Of course, the teachers did not come under this category in his opinion. He continued: "If our present teachers do not want to work for the wages we offer, we can easily get some who will. There are lots of teachers."

At this point Dr. Moss, who had aspirations to be the next mayor, arose and made the following motion:

"Gentlemen, I move that we retain the present salary schedule for the coming year."

This motion was seconded by the fifth member of the board.

"Any remarks?" asked President Gallin.

Superintendent Standard rose to his feet. "Gentlemen, before you vote on this question I should like to have you thoroughly understand what this motion would mean if put into effect.

"First, it means, beyond a doubt, that our present teachers will leave our school system. It is true that there are teachers and teachers; but, only those of experience with a high success grade can keep our schools up to the present high standard of excellence. It means that we must hire beginners. And while a few of these might prove successful, in the main we are taking big chances. Other communities, regardless of size, are expressing their appreciation of good teachers by paying a wage nearly comparable to that paid to workmen of experience and efficiency in other lines. If the board of supervisors were considering the digging of a ditch to drain Huckleberry Marsh, just outside the city limits, they would not think of appropriating the money without consulting the county surveyor. He is the logical expert on that subject. And without proper advice they might not appropriate a sufficient amount. The problem of appropriating enough for the proper training of our children for good citizenship, is a greater problem than the digging of a hundred ditches. In my fifteen years of experience as a school executive the following reasons for not hiring an entire corps of inexperienced teachers have literally been forced upon me."

Here Mr. Standard referred to his notebook, fully elucidating each point as he read it. For the sake of brevity we will borrow the notebook and repeat the points as he had jotted them down.

"1. Teachers from normal schools and colleges are often lacking in the rudiments of scholarship. They need experience to complete their education.

"2. The methods they learn are frequently not directly adapted to public school conditions. They need teaching experience that they may

lose some of their youthful ideas and find themselves in a practical work-a-day world.

"3. Their training too frequently dulls their initiative and originality. They need time to adjust themselves to a broad-minded world. Some of the professors failed in public school work, received higher degrees, and then engaged in teacher training. These men are sometimes dictatorial.

"4. Our normal schools and colleges need more successful public school men on their faculties.

"5. In our institutions of higher learning there is 'too much ado about nothing.' A great deal of the work required of teachers is not directly related to the efficient practice of the teacher's profession. Useless reports, investigations, and papers are required to lengthen what would be a three weeks' course into a twelve weeks' course.

"6. Even professional ethics is not included in the course of study.

"7. The work of finishing the training and supervising of beginning teachers requires a lot of time and patience, and even at the best some teachers will be failures. A school system must sacrifice efficiency for such inefficiency.

"8. The institutions of higher learning are providing the educational world with many excellent pedagogical books. Some of the ideas are years ahead of their time. But when one visits these centers of culture to observe the practice of these advanced ideas he finds that the archaic (?) methods they decry, are identical with the ones they use.

"9. Teachers too often want to do what they have seen their instructors do. A superintendent, or grade supervisor, must use a lot of tact to convince the beginners that those are too frequently the things not to do. Especially is this true of high school teachers.

"10. Good teachers, the same as successful professional men and successful skilled workmen in any line, are scarce. Their worth and influence cannot be measured in money.

"11. The difference between a highly productive teacher and a school keeper may be \$10 or \$20 a month. A few thousand added to the cost of operating an inefficient institution will transform it into an efficient one.

"12. Not to adopt a higher salary schedule at this time will certainly necessitate a rebuilding with raw material the splendid school system we already possess. This will require a number of years of patient labor. The lowering of our educational standards will result in a greater clamor than a slight raise in taxes. The issue before us is paramount; we are building citizenship for the future; and your children will have to pay for your errors."

The fight was over. The school board had made the mistake of using air rifles against a machine gun. Superintendent Standard's shots had shattered the concrete walls. There was no recourse but surrender. Four members of the school board called for recognition. President Gallin gave Mr. Weis the floor.

"I withdraw my motion if the second is willing."

"Absolutely," answered the fifth member of the board.

Then Mr. Weis continued: "I herewith move that the board adopt the salary schedule as submitted by Professor Standard."

Three voices shouted, "I second the motion." The vote was taken without comment, and was unanimous. The schools of Blunderborough are still noted for their efficiency.

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The Human Factor in Supervision

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The demand so commonly voiced nowadays in our professional literature and in the heated atmosphere of summer school classrooms, that the executive heads of our schools devote most of their time to supervision of teaching, causes more guilty qualms of professional conscience among superintendents and principals than our sedate writers and professors imagine. Many a young school head returns from his summer's trip to the big city university and its graduate courses in administration and supervision fired with a burning urge to really try to do something about it. And, if, on returning home, his good intentions survive the meetings with self-appointed delegations of citizens who meet him at the railroad station with "purely administrative" difficulties stirred up during his absence, our superintendent or principal is very likely to broach something new, strange, and startling to his teachers the first fair chance he has at them. It is shortly thereafter that the words of Holy Writ recur to him: "Lord, what have I done?"

Our novice begins to have forebodings that his recently acquired higher degrees may be high degrees of temperature only. His inspiration becomes perspiration. If he is sufficiently hardened to withstand the tolerant smiles of his crack primary teacher of some nineteen years' experience when he attempts to expound the superior merits of the Kitten and Butterfly methods of teaching beginning reading, his resistant exterior is very likely to crack when he accidentally overhears Mabel and Gertie refer with giggles to "snoo-pervision by stupid-in-tendents." There was a world of experience behind the solemn statement of a superintendent who had held one job 25 years: "I have found that the very best method of supervising the classroom work of teachers is to say absolutely nothing to them about it."

It is at this stage in the development of our young superintendent that he begins to think about the remark of the old colored woman anent the new parson: "He's fine to argufy, and awful good to stupify; but, he just can't nohow show wharein." He begins to wonder what has happened to his magnetic personality. If he is a shrewd and sensible man, with a normal emotional equipment, he will, in due time, become possessed of a liberal degree of genuine humility. And, it is then, he will have learned one of the first great lessons in the equipment of a successful professional supervisor.

Good Will as a Professional Asset

He will now likely begin to analyze a situation in human relationships which far too many are content to muddle carelessly through. Other professions will offer him lessons. There is many a school executive who would profit immensely by quietly observing the methods and manners of his favorite dentist as he goes on the job. At a recent meeting of the American Bar Association, one of the leading lawyers of this country said: "Perhaps three-fourths of the successful lawyers of my acquaintance owe their eminence, not so much to their superior erudition, as to their superior ability to establish and maintain effective personal contacts with the courts or with their clients." This does not argue that a civil engineer should know less about roads and bridges than about how to influence the mayor and city council into giving him contracts. The superintendent deals constantly in the stuff of human nature itself; his head must be filled with the angles, stresses, and materials of the human



mind and heart. His finest professional knowledge is the mainspring of his most subtle policy. His ability to fathom human motives, to bridge natural human differences, establish an entente cordiale with his coworkers, and to make his own ideas dynamic forces in others, are among his most important professional assets.

Given this realization, how may a school executive profit by it? He might, perhaps, begin with a survey of what may be termed his organization setting; his administrative leverage upon his fellow workers in his schools. Among other excellent reasons why a board of education should give the superintendent of schools the privilege of selecting his teachers is, that by this action, they confer upon the superintendent the halo and crown which nearly any of us poor humans are altogether willing for those to wear who preside over the dispositions of our jobs. This crown, while containing a few thorns, is largely one of olive branches, and its aura is good medicine for a superintendent's wrinkled brow and gray hairs; it adds benignity to his smile and potency to his frown. A colored principal in a Georgia city had the essence of the idea when he begged his superintendent for the privilege of signing the principal's name to the teachers' contracts. When asked why he was insistent upon this point, he replied: "Boss, if them colored ladies get the idea I haven't a hand in hiring them, I'd just as well resign right now." A superintendent knows that no matter how casually or naturally it is done, if he is forced to accept the nomination of a member of his board for a teacher, that teacher has looked to the board first as the fount of her major blessings. Which wouldn't be so bad, perhaps, if it didn't become a habit with the teacher, and in due course of time a custom in the entire system, to take subterranean shortcuts under the pedestal of the superintendent. There are scores of forms of respect for the chief inherent in the human breast, and it is not well with the fortunes of the chief when his devotees discover their idol has feet of clay.

An insistence on keeping undimmed a teacher's clear sense of the eternal fitness of things is not an argument for the use of the fear of losing a good salary rating, a recommendation, or a job. Such incentives stir a professional supervisor's sense of humor. Such fears are extremely mild emotions for the average young lady teacher who does not worry much about blasting a career of an average duration of some four or five years. The advantage to the superintendent is the advantage gained by a general who can select his own battlefield, and who may place himself on high terrain. He does not ask the "unworthy but sweet reasonableness" which characterizes the attitude of ordinary humans to the utterances of the deity of their meat and bread. He de-

mands merely a necessary leverage on his environment. He must steer a course and push his way through stormy seas and headwinds at times, and cannot always depend on the favoring winds of his associates' well-wishing. He is no supervisor who merely rides the waves; he must have a well-shaped vessel and a strong driving force, and both are needed increasingly in proportion to the weight of his cargo.

Mutual Acquaintance and Respect

Having striven to make his administrative organization a substantial supervisory asset, our school head will have to engage in a sort of artist's preliminary block-out or outline of the human material with which he is to work. Are all his teachers equally in need of help? He may greatly desire to go about doing good, and to be a real supervisor; but, he may find a substantial number of teachers who want no supervision and think they need little help. Many would rather receive commendation of the little they already know. They wish their supervisory dessert on the wrong end of the meal, and let the whole meal go at that. Many of the younger teachers are much happier to receive as few visits as possible. One of the greatest educators of the country never tires of recalling his profound relief when, expecting a visit during his first month's teaching from his county superintendent, he received the glad news that the superintendent had gone into a ditch eleven miles away with a broken axle on his car. There are a good many times when it is well to leave a teacher alone. Often a good salesman will spend most of his first visit getting acquainted with his prospect, ascertaining his needs, and establishing himself favorably in the mind of the man to whom later he is to broach his business. Nine-tenths of the sales of the world are made by people who are well and favorably acquainted with the buyers. The schoolman must dispose of his line of confectionery, dry goods and notions according to the rules of the selling game.

It will help the young supervisor to think of his teachers as belonging to certain groups. The teachers in an average city system differ enormously in their stock of abilities and in their needs and interests. The blase young normal school graduates may still be afflicted with a diploma complex. His teachers, long in the service, may forget their ages; but, never the length of their experience. The primary, intermediate, junior high school and senior high school teachers must have different ministrations for their needs in subject-matter and methods; there are often certain personality traits distinguishing upper and lower grade teachers, according to some observers. Ambitions and attitudes toward teaching as a profession or career differ. The married women with their household cares and interests are another law unto themselves, when they are permitted at all.

Perhaps, one of the most valuable bases of classification for one to select off-hand is the attitude of the teachers toward self-improvement. A small group of teachers with a strong desire to make professional gains while on the job, may well attain more by working enthusiastically with their superintendent than a much larger group working perfunctorily through direct or indirect compulsion. One lesson which may be gleaned from the Parable of the sower is: don't waste good seed among brambles, or on hard or stony ground. Often the group with the most promising attitudes is the one needing help the most; but, the exceptions are

quite too numerous to permit a rule. After the good work is under way, the more self-sufficing may be inveigled into taking part, and to make contributions to the program which has been started.

Recently an expert educator was called into one of our large colleges and assigned the improvement of instruction in the institution. Now the supervision of the methods of teaching in colleges is a subject left severely alone by the teachers of methods in colleges, as a matter, perhaps, for their president to do some research work upon. In this case, the young instructors and assistants were the immediate recipient of supervisory attentions; the professors and heads of departments awoke to the needs of their young assistants after some discreet manipulation of the spotlight, and incidentally some in high places in professional ranks began to make some quiet experiments in their own work. It was not long until the whole institution, with the inevitable exceptions, was working whole-heartedly to the end that modern methods prevail in the institution.

The Technique of Human Relationship

Having striven to make his supervisory setting as helpful as possible, and having selected the groups with which he will begin work, our supervising novice will do well to study the technique of the human relationship side of the job itself. An iceberg is a poor traveling companion for an ocean liner. Do your teachers sheer away from you? A superintendent soon notices that the men who come to his office on business often never again have a chance to revise their first and only impressions of the superintendent, and he endeavors to put over his personality as he would have his visitor remember it. A principal soon learns that it is much easier to talk to an irate patron when the school head can call his visitor by his first name. When we have worked elbow to elbow with men, have offered them congratulations or condolences, and have broken bread with them, we find them less difficult to approach, easier to interest, consequently a bit more easy to convince. A personal predilection for a supervisor is holy ground. The homely frame of many a superintendent has consecrated the pathway over which he has traveled, and teachers unto the third generation after him still follow the trails he blazed.

Having seen to the more personal relationship often possible, to the utmost degree his social intelligence permits, the aspiring supervisor might, with profit, adopt the slogan he hears on his football field: "Get with 'em!" with, however, a slightly different meaning. To be the actual and well-liked head of his school system does not mean that henceforward an executive may pompously rely upon the ipse dixit of his authority to put over his ideas with a group of supervisors or teachers. He makes himself, thereby, a most promising candidate for the premier supervisory booby prize. There is some possibility that even a supervisor or a superintendent might be wrong. Perhaps, the one who lingers upon this possibility longest is the classroom teacher. If a superintendent or supervisor is not naturally a pretty good sport when he is outguessed, he will eventually become one if he successfully sticks to the supervisory game. When he sends out the law and gospel via the written word, he must mentally affix just under his initials the memo expressing the reception accorded his choicest thoughts: "Mimeographed but not read." The efficient head of the department of rural school supervision of Alabama has a happy remark for her county supervisors: "If I am privileged to work with you a few years longer, you will yet make of me a good supervisor." There can

hardly be an attitude more promising of ultimate efficiency in securing the best possible results. A superintendent must discard the idea that supervision consists in giving his teachers, once a month, a lecture on the cultural benefits of the study of latin, or on the hygienic effects of dry, hot air. He should cease reading epitaphs on tombstones, fire his janitor, and get busy on his neglected job of supervision. His time is too limited to permit him to attempt competition with the echoes of cloistered academic halls by imposing some bromidic theories upon his busy teachers. Pedagogical pep, not pedagogical pap, is what is needed.

The Supervisor's Ability to Do What He Orders Done

It is taken for granted that one of the absolute minimum essentials of the superintendent's stock of professional equipment includes his ability to do in the rougher outlines, at least, what he asks his teachers to do. Never will a certain excellent college class in supervision forget the bewilderment of their professor when, by prearrangement, they socialized him into complete silence in the midst of his excellent lecture on socialization. Nor did another professor, of sedentary habits, somehow warm up to the occasion, nor to the hearts of his students, when, at the close of a spirited discussion of the value of excursions some tactless student mildly suggested: "Let's have one."

If the superintendent will note the influence of habit in his own work, and attempt to change some of his own wasteful methods in some phase of his work; as, for instance, his way of handling details, he will appreciate the difficulty teachers have in changing their methods of teaching. Almost any change in our habitual ways of doing things induces a restless or unpleasant state of feeling. An expressed distrust of new methods, defense of the old, and often dislike for a supervisor, are rationalizations designed to conceal one's shrinking from the new. To deal with such fear one must offer a great deal of good, honest, human sympathy and fellow-feeling. When the average teacher differs with the superintendent or with her principal, she is generally quite sincere, and the wise man always respects sincerity. Supervisors and teachers, after all, are traveling in the same general direction and over much the same kind of country. Only the paths which they travel are somewhat different. Perhaps, the supervisor thinks he can show a stumbling teacher a shorter or smoother way. He cannot merely call, "See, yonder is a better road"; for the teacher will naturally reply: "I am a little afraid to trust the directions of strangers. I know nothing of your path, I see mine is well traveled, and I know I can follow it. I must pass over rough ground to reach your pathway, and I have a heavy burden to carry." The supervisor must pass over to the road the teacher follows, "swiftly put herself in the weak one's place, and carry her burden." Then, and then only, has the supervisor earned the trust which energizes the command "Follow me."

Adjusting the Teacher's Load

There is a certain amount of nervous stress and strain accompanying the work of the teacher which should be recognized and provided for by supervising executives. It is a rare principal who does not see a teacher undergoing some form of emotional outburst occasionally. If the cause lies in a teaching situation, an excellent supervisory opportunity may be squarely, if rather vigorously brought

to view. More frequently, there are less obvious stresses and strains which hinder efficient work and find voice in harmful forms of school gossip. One pretty regular function of a superintendent's job—so regular it is almost routine—is for him to go about looking for hot bearings and squeaky places. Most superintendents have been forced to hammer out a philosophy of school administration, and this generally includes a sort of Philosophy of Oil. A well-adjusted mechanism, which has been running for a while, does not require the lubrication of a newly set up machine. There is inevitably a good deal of vibration, jolting and jarring from any kind of reciprocating machine such as a public school system must be. Overloads must be watched, and new parts in the machine carefully selected and attuned.

To avoid unnecessary stresses and uncalled-for creaks and groans in the mechanism of the public school system one must look, in factory parlance, to his routing of operations. He must look to the significant outcomes of what he undertakes. An application of this is found in a program of administration of standard tests. The supervisor gives the tests, the teacher does the tedious work of scoring, and the superintendent's files swallow up the results. The one who should make practical use of the test results, after the diagnosis of the experts, is the teacher. To deprive her of the fruits of her labor is to nip in the bud any further effective interest in a program of testing. Again, testing, like most comparatively new devices, may be overdone or poorly done or needlessly done. It is easy for the teacher to get the attitude of the teacher who complained: "I do not need to sit up late for a week marking standard tests so I can find out whether or not my students are mostly dumbbells. I have found out long ago. What I want is somebody or something to tell me how to make them snap out of it." We smile at the principal who complained that the standard tests he had given had not done his students a bit of good so far as he could see; but, there are a goodly number of principals and teachers who miss the significance of testing almost as completely. The "what shall I do about it?" idea is the most fruitful one brought out by the whole testing movement. Herein lies our supervisory opportunity.

Cooperation Through Democracy

Teachers must, somehow or other, be made to feel a responsibility for a supervisory program. A public service corporation regards it excellent business to put out stock in small denominations among the voters of the section the corporation serves. Our government, in times of war, puts out liberty bonds and thrift stamps. Where our purse is our heart is also. A shrewd superintendent lets his teachers have a hand in making out the course of study for the city. A good supervisor is only too glad to have others take credit for his ideas. Thereon hangs a tale. There is another advantage also. In this day of Democracy in education, teachers have become rather accustomed to having their opinions consulted, if only at times as a matter of courtesy. Often, measures are thrust upon them which infringe what they believe to be their rights; while perfectly amenable to ordinary administrative measures, much friction could easily be avoided by explaining the regulations to them, securing and answering their objections, and otherwise laying the track for action. Even a steam roller travels better on paved highways than cross-country.

It is well for a supervisor to be constantly on the lookout for the tendency in most

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teachers to stress the personal bearings of suggestions made. Remarks, thought by young superintendents and principals to be wholly impersonal, or at least safely camouflaged, are applied with disconcerting suddenness to the sorest imaginable spots. It doesn't do much good to accuse the fair sex of an undue interest in what people think of them; anyone long in public life must learn to take human nature as it is and make the most of his knowledge. One must learn to anticipate and provide for the reactions he is stirring up. Many teachers have almost an uncanny faculty of scenting out the single word of criticism from a whole ream of good advice and suggestion; and to them this single word is alone significant. Many superintendents of certain temperament can treat their teachers as a Dutch uncle would, escape unscathed, and leave an appetite in their victims for more; but, to attain these awesome heights in handling one's fellows is a long and painstaking process for the average young man, and is not to be attained by a sudden fit of impatience or anger.

Counting Misunderstanding

One accustomed to positions involving chieftainship over others grows careless after a while, and forgets many of the fine points which were instrumental in securing him his position in the first place. Hence, the common American phenomenon of fallen public idols. Often, in unguarded moments, which occur much oftener than a really charitable public imagines, careless or half-humorous remarks stir up comment, misunderstandings, misquotations, and often a veritable hornet's nest of undesirable consequences. No one is infallible in his judgments, and no one who aspires to intellectual leadership can afford to saddle himself still further with the handicap imposed by a loose tongue and undisciplined mind. About the only kind of misunderstanding which a supervisor may thus recklessly court is that of private commendation and praise. Self-confidence and a feeling of success are most powerful predisposing forces toward success. A little chestiness on the part of a few teachers is curbed with comparative ease. However, if a supervisor consults one or two teachers publicly, he will do well to give everybody a feeling that they are included in his category of better minds. Nowhere do the finer instincts of a gentleman come into better play than in such relationships. Teachers, who like to be consulted, along with their peers are quite human in their demands, while those most insistent on the privilege often are smarting under an inferiority complex, probably due them, and are mollified with comparative ease. There is no danger of their attempting a demonstration lesson, for instance; but, they like to be invited to do so. Those critical of existing conditions often have nothing else to do, and leaders take pains to maneuver them into immediate contact with the difficulties and problems of those struggling for solutions. One faculty member of a large university confesses he has almost ceased offering suggestions for the improvement of conditions; for, he invariably found himself placed on a committee of investigation and relief when he indulged in vicarious philanderings into the realm of his president's duties.

Sometimes, when visiting a teacher, a superintendent may not see many points calling for any particular discussion. It seems to him, however, almost like neglecting his duty not to say something along the line of improvement, so some minor criticism is passed out. Now, anything at all from the superintendent

on his infrequent visits stands out in the mind of his teacher, and the forced minor criticism may seem almost a prediction of her entire professional destiny. Unless the superintendent is quite sure of his ground, knows what the teacher is trying to do, has been doing, and means in the future to do, there will not be much left of the criticism after the teacher unlimbers her defensive guns. And she will be ready for him next time, when, perhaps, he will have well-based suggestions. He would do well in the first place to mention only the promising procedures in her work, or to endeavor to awaken questions on the part of the teacher, until he knows his ground is secure. A wise general does not ordinarily start a campaign unless there is a reasonable prospect of success.

Sometimes, under the conviction of an educational principle strong in the heart of the supervisor; but, hardly known, perhaps, to the teacher, a fragmentary criticism or suggestion based on such underlying principle is made to anent some more or less harmless procedure on the part of the teacher. She would have to study numerous philosophical or sociological theories in order to be able to comprehend what the supervisor is driving at. Not having the broader bearings she simply thinks the supervisor is dreaming queer dreams, and she lets it go at that. A well-educated supervisor, with little experience, will have to go through some agonizing mental gymnastics to adapt his ideas to the comprehension of the average teacher, whose knowledge of educational principles was, perhaps, dim in her mind when she was exposed to them for the first and last time in normal school.

Constructive Units of Supervision

Perhaps, the most serious drawback to efficient supervision on the part of a superintendent, busy with a great variety of pressing duties, is the numerous interruptions and lack of continuity his programs must suffer. Efficient supervision proceeds by units. The lawyer and doctor proceed by cases, and must see their clients and patients all the way through their difficulties. The supervisor has a definite unit of work, and must see his program through to reap any benefits of any moment. Of course, some random inspectorial work of a degree of value may be performed by the supervisor who wanders vaguely around or flits vigorously about from place to place; but, to put into definite action one good idea and then see it through is worth a multitude of unconnected and often trivial activities which are better done in the service of bigger causes. A cannonball will sink a battleship, while a load of grape-shot will only scratch the paint. The little fluttering piece of white paper left on a teacher's desk by a visiting superintendent is often symbolic of his surrender of much of what might be his finest work of supervision; at best it is but a flag of truce. A unit of supervisory activity, such as a testing program, a health program, a pro-

gram for the improvement of silent reading, or a program for the building up of school morale, interest, and spirit will, along with many other similar units of work, afford a sort of core or central idea about which may be grouped a vast number of words of encouragement and commendation, long and short visits, and conferences which naturally suggest themselves. The unified faculty mind is set to an end, and the whole supervisory activity is vitalized and itself generates the drive which makes its activity self-sustaining. The superintendent or principal, busy with a multitude of tasks, should plan as many self-sustaining programs as he can. The personal good will and cooperation of his fellow workers is the flywheel which makes a continuous program possible for the superintendent or supervisor. It is for the times when they cannot be present that supervisors should make their most careful plans.

The ability to make effective personal contacts is rather general in scope, and stands the superintendent in good stead in his two other functions of administering and organizing. Schoolmen filling high places, men who build up their systems, executives with a strong hold on their towns, all have the happy knack of molding the plastic soul-stuff all about them to fit their own destiny. As there are generally plenty of men with a happier knack at the business than the superintendent, he often finds himself the willing or unwilling follower of stronger minds. From the low form of cunning exercised in politics to the finer art of making life's friendships by seeking the uncertain rewards of sacrifice, one has need of skill. Fortunately, the development of the personal relationship side of our social intelligence is comparatively easy. Specific and persistent practice in the common methods of getting along well with one's fellows and in the art of lining people up on one's side is generally forced upon a young teacher or executive to a certain extent, and such practice is one of the most valuable elements of teaching or administrative experience. Nor must the common mistake of young executives of imagining that, because they think of doing something, the matter is forthwith settled, be permitted to interfere with planned, persistent practice in self-improvement. If one does not have the will-power to stand up to the task of self-improvement in the personality traits of the leaders of human affairs, he can, at least, put himself under the necessity for learning, by taking a wider part in the activities of groups of people everywhere about him; worthy leadership is commonly in demand, and practice in the artistry of making effective human contacts may be secured each time two or more humans gather together.

No matter what the pattern of the weave, the warp of human contacts making for progress is held together by the woof of teamwork. The modern tendency in teaching is to look to the activities of child nature for guidance in determining the teacher's methods. From this tendency the supervisor has received her most fruitful clue to effective work with her teachers; their everyday work, human needs and aspirations are her inspiration. No less may the executive head of a school system learn from his principals, supervisors, or teachers. Nor will the methods of a skilled supervisor, with her teachers, be amiss in most of the relationships of a superintendent with his board and with his city. In the final analysis, it is in many ways true for all alike that "a little child shall lead them."

THE VISITING TEACHER

There is need for a link between home and school because of changing conditions in education and society. Schools are larger and more impersonal. Mothers as well as fathers have vocations. The exactions of the school are not always known to the parents, especially to foreign parents. For these and other reasons the visiting teacher came into existence to help solve the problems of the unadjusted child—the child who is a behavior or scholarship problem, the child who is hampered by social or environmental conditions, the child who is in need of extended or differentiated educational opportunities, and the like.

The School Board's Awakening

Margaret M. Alltucker.

Practically every boy and girl in Smithville acknowledged Clyde St. John, the elementary school principal, as their best friend. For five years he had been their teacher, counsellor, and director of sports. His ability to promote good citizenship was recognized by a progressive superintendent in a neighboring city, who offered him a position at a much better salary. He decided to accept it.

A meeting of the Smithville school board was called to consider his resignation. Each member of the board was urged by certain factions not to accept the resignation; but, to offer an increase in salary. The policy of the board for the previous year had been definite retrenchment. The question was should they swerve from it in this instance. Factions, composed of dissatisfied parents who wanted special privileges for their children, which had not been granted, and the selfish few who regularly wailed about increased taxes every time public expenditures were mentioned—these groups together with the friends of the man who sought appointment as elementary school principal five years before—urged that a new man would do the job just as well at the old salary.

It happened that the superintendent of Smithville's large shoe factory was a man with a long head with a big bump of humor. Every job in his factory had been carefully analyzed. When he wanted a man to fill a certain job, or when he was puzzled as to what salary a man on a particular job should get, he referred to the analysis of the job. This showed the factors of employment—where the work was done, the wages paid, the special hazards—entrance requirements, regular and occasional duties, knowledge required, both technical and related, and the promotional possibilities which the job offered. On these facts the factory superintendent based his decision.

On hearing the discussion as to whether or not the elementary school principal's salary should be raised, the factory superintendent decided that an analysis of the job was needed. With this, the matter might be settled justly rather than by opinion unbiased by facts. One of his boyhood friends, who also had a long head with a sense of humor, was an elementary principal of long experience in an adjoining town. The factory superintendent invited him to make a general job analysis of the elementary school principalship. The two worked over the problem for several evenings—the factory superintendent supplied the outline for the analysis; the school principal, out of his experience on the job, supplied the data. Their analysis, when submitted to the Smithville school board, resulted in the elementary school principal's salary being raised \$250 above what the neighboring city had offered him. This statement is quoted from the minutes of their meeting: "The following analysis of the job of elementary school principalship has awakened us to a sense of our responsibility in providing an adequate salary for one who holds a most difficult position."

JOB ANALYSIS—ELEMENTARY SCHOOL PRINCIPALSHIP

I. Factors of Employment

Places of employment: Workshops of democracy—public schools.

Wages:

For beginners: Whatever the employee will accept above the amount paid the local elementary teacher.



For experienced workers:

Minimum: Same as for beginners.

Maximum: Depends upon how successful principal is as press agent for his school, and what competition there is for his services in the educational market. Upper limit is fixed at from three to five thousand dollars so that too many capable men will not compete for the job.

Length of learning period: Infinite duration of existence.

Usual length of service: Until the next stepping stone is reached.

Special hazards:

1. Political entanglements.
2. District prejudices.
3. Parental whims as well as superintendent's fancies.
4. Internal dissension—external pressure resulting from dismissal of inefficient teacher.
5. Health risks—henpecking and back-biting—assaults from the busybodies of the community.
6. Yourself—lack of backbone to carry out your own convictions.

II. Entrance Requirements

Special skill: Agreeing with every fond parent that his child is bright, convincing him that both he and the teacher are always right.

Special training: Sometimes none—depends on how much the school board knows about schools.

Personal requirements:

1. Missionary spirit capable of transforming cannibalistic, disgruntled office seekers into cooperating Christian teachers.
2. Clean mind as well as clean collar.
3. Good moral character; but not so goody-goody that when occasionally he fights and fights hard, the whole town isn't shocked.
4. Ability to inspire confidence, respect, esteem, and a desire to follow, in, not only a group of rioting youngsters; but also a faculty, many of whom know, or think they know, as much or more than the principal does.
5. Contagious sense of humor that works even during a bond campaign, or a school exhibit.
6. Evidence of continuous professional growth—ability to make pupils, teachers, and self increase in educational stature.
7. Human interest in every mother's son, despite the failings of mother.
8. Frankness which leads to frank discussion with superintendent when requested—discretion which keeps matters still under discussion under one's hat.
9. Exemplification of the interest, enthusiasm, and optimism which is desired in teaching corps.

10. King-becoming graces—temperance, both an inferiority and superiority complex, keen discrimination, and ability to analyze human nature. However, the spiritual bootlegging process of psycho-analysis is not necessary.

Educational requirements: Elementary school graduation to Ph. D. degree—usually much higher than most of the business men of the community.

Physical requirements: Not more than ordinary strength; but great stability of nervous system and freedom from liver complaint.

III. Duties Regular Duties

Be everything from assistant janitor to expert authority on classroom procedure and course of study making.

Advise that teachers be appointed, retained, transferred to another principal against whom you hold a grudge—or if there is none such—dismissed.

Determine how high the high school principal's authority is; but, never murmur when he oversteps it.

Delude the supervisor of every special subject into thinking that when she visits the school she is running it.

Plant love in the heart of every young culprit, for the angry teacher who fires him out of her room to your office.

Persuade some teachers to stop talking long enough so that pupils may ask at least one question apiece.

See that the janitor janitors; but, do it in such a way that when he talks about you, he makes complimentary remarks.

Give just as much homage as is desired to the newly elected superintendent into whose cast-off elementary principal's shoes you have stepped.

Run a dairy in the school for mal-fed youngsters.

Inspect school building and yard twice daily; but, expect both to be in state of disorder on the rare event of the superintendent's visit.

Arbitrate all difficulties between irate parents and an indiscreet teacher—as long as conscience permits—stand back of the teacher. At the same time satisfy the parent.

Let the people select the members of the board of education—thereafter live as peaceably with these members and work as effectively as your own limitations, and your duty as an interested citizen, permit.

Set an example to teachers in quality and quantity of work accomplished—in other words, work longer and harder than any one else in the building.

Sense the superintendent's policy, and carry it out without bothering him to commit himself as to just what it is. While you may not enjoy it, when necessary, be a clerk who executes mandates from above.

Call the attention of the superintendent to needed changes and to danger ahead; but, do it in such a way that the superintendent will always be sure that he was the first one "to smell smoke."

Teach teachers; see that teachers secure the greatest possible amount of recreation from faculty meetings—if necessary, provide it.

Do a day's clerical work each day after three-thirty when teachers and pupils are gone.

Iron out fads and put a crimp in frills; at the same time keep your school up to date.

Say "no" to impossible requests of pupils in such a way as to be beloved by all.

Act as press agent for your school—let everybody, especially the other local principals, know that your school is the best in town.

Give only a small part of your energy to your job as principal, reserve the rest to fight the attacks of well-organized groups whose aim is to defeat the purposes of public education.

Assume responsibility for community leadership—run the Chamber of Commerce, the Rotary Club, the Improvement Association, the Parent-Teacher Association, the Men's Club, the Community Chest, the Boy Scouts, and the Historical Association—everything except your own school.

Occasional Duties

Earn a living wage by working after school hours on other jobs.

Be conversant with the best professional literature—especially when you are showing off before a teachers' association.

IV. Knowledge Required

Technical Knowledge

One million details of school organization and administration; along with a philosophy of

education which prevents one from being blinded by the dust of details.

General understanding of the teaching technique, human behavior, the contents of the seventeen subjects of the elementary school curriculum; but, not how to wield a birch rod or a rubber hose.

Such intimate understanding of all modern movements in education that no teacher is permitted to go off half cocked on any one of them, using priceless children as her ammunition.

How to house 3500 children in a school building which was built to accommodate 2000.

Meaning of the three vowels, I, A, and E when preceding Q.

How to arrange a five-hour schedule of classes that shall include at least one-half of the subject's required by legislative enactment to be taught in the elementary schools of your state—to say nothing of the subjects required by rulings of the state board of education and local school board.

Related Knowledge

Such facts as the following:

Punishment does not have to be meted out for the breaking of rules that are never made.

A hobby, such as a rabbit farm or practical applications of the Einstein theory, is the salvation of every elementary school principal.

Successful educational swimming demands that the principal's head be kept above the sea of blackboard erasers, attendance records, questionnaires, and office reports. His hands must be on all of these; but, his eyes should be above water.

V. Promotional Possibilities

Below are listed two lines of promotion and units of training for promotion.

1

One Line of Promotion

From elementary school principal to high school principal or superintendent of schools.

Training for promotion: Courses in educational administration, preferably by some one who has never been a school administrator for a single day.

2

Another Line of Promotion

From elementary school principal to a seat at the right hand of the Angel Gabriel.

Training for promotion: Continuance in service as elementary school principal.

The Business Manager in the Public Schools

From the Standpoint of the Professional Schoolman

C. B. Wivel, Norwood, Pa.

No matter how small the school system there is work to be done which partakes more of the nature of "business" procedure than of educational procedure. In the smaller school systems where this work is not so large as to require the full-time services of one individual, the work is handled by the superintendent, by his secretary (sometimes called clerk), or by the secretary of the school board. No matter who performs the various tasks of business routine the work is specialized. To be properly performed such work demands the services of one who has some knowledge of business routine and practices.

If the amount of the tasks does not demand one's full-time and is performed by the superintendent, he should be qualified to perform these business duties in the most efficient and economical manner. For if he does not do so, just to that extent is his work as superintendent on a lower plane than it should be. This is equally applicable to the superintendent's secretary when discharging such duties, to the secretary of the board when attending to them, and to the business manager when he is devoting his full time to the work.

As soon as the school system grows large enough to demand the services of one individual all of the time there is need for a business manager. In no instance should the superintendent be so encumbered with business detail that time is taken away from his work in the educational department. The school superintendent must be responsible for certain business routine; but, never should it be allowed to make inroads upon his time to the detriment of his work primarily of an educational nature.

The school superintendent should be held responsible for the performance of certain business details; but, he should be empowered to select officers to do this work. To do otherwise may be making the superintendent a mere clerk rather than an educator. The larger the school system the greater the necessity becomes for the superintendent to delegate authority for the performance of certain

tasks. It is no more unusual to allow a superintendent to delegate authority to a business manager than it is to allow him to delegate authority to a supervisor of music.

A Variety of Methods

During the past 75 years the work of the business manager has been performed by a variety of individuals by a greater variety of methods. The title of the officer in charge of the business affairs of a school varies all the way from the dignified title of "director" to that of "clerk." At times we find him on a par with the superintendent. In fact, he may be a "superintendent of business affairs," while the man in charge of the educational work may be the "superintendent of instruction."

In most large cities, and in some smaller cities, the man in charge of the business affairs of the school system is responsible directly to the school board or a committee of the board. Since the committee system in school board action has been generally found wanting, this latter practice is considered undesirable. The tendency under such situations is for the committees to meddle in matters which are purely executive in character. The Portland school survey revealed the fact that the business department was more efficient in its operation than the educational department. This was probably due to the fact that the school board members could supervise the work of the business manager much more critically than they could that of the superintendent. Moreover, the work of the business manager is not of such a diversified nature as that of the superintendent.

In some places we find the business manager in charge of construction, engineering, purchasing, buildings, and janitors. In others his duties are confined to purchasing, the handling of finance, and the care and issuance of supplies, while a special officer has charge of engineering, construction, and buildings.

The place of the business manager in a school organization may be best understood by citing an instance in which he was not in the right

place. An investigation of the Boston schools some years back led to the fact that the business manager was not subordinate to the superintendent. He was practically independent of the superintendent and was responsible to the board. Upon one occasion the business manager made certain purchases involving large amounts of money before the superintendent knew anything about the purchase. Through lack of knowledge of the condition of the finances of the schools the superintendent did not know for a month how serious the financial problem had become. On one occasion the superintendent charged that the business manager refused to give him information about finances and the budget. The business manager claimed not to have received such a request, either by letter or otherwise. A prolonged controversy demonstrated, strikingly, the lack of cooperation between these two officials of the Boston school system. This example of how not to place the authority of the business manager in the schools is not confined to the New England Coast.

In Cleveland the original plan of school organization called the business manager "school director." This official had the power to appoint all other officials, including the superintendent of instruction. His power of appointment did not, however, extend over the employees of the department of instruction.

In Milwaukee the secretary and business manager is on a plane with the superintendent. He has charge of the census, the bureau of accounts, the clerical division, the bureau of supplies, inspection, and the bureau of buildings and grounds. The superintendent exercises joint control of the bureau of buildings and grounds. This bureau has charge of construction and repairs.

It must not be inferred that most school systems place the business manager on a par, or above, the superintendent in authority. The Elementary School Journal of November, 1921, reports that the United States bureau of education received 520 replies to a questionnaire

sent to school systems in cities from five thousand to thirty thousand population. In 474 of these cities all of the employees of the school system were subordinate to the superintendent, except the secretary of the board. Assuming that the secretary of the board did not assume any duties belonging to a business manager, this would indicate that, in most cities in this class, the superintendent has full charge of employees in the schools.

Responsibility and Authority

If a superintendent is to be charged with administering the schools, he must be free to choose his officials. He must not be obliged to "bargain" with a business manager placed on the same plane with him. He must be able to require the performance of duties from the business manager; he must have free access to all information kept by the business manager; he must be free to lay down the policy to be followed by the business department. This can only be accomplished when the business manager is subordinate to the superintendent. Rather than eliminate the importance of this office, it gives the business manager the opportunity to magnify its importance and to show how such an official can properly serve the schools, and, of course, in turn the community. Where the stress is laid upon "business organization" rather than upon "business organization in accord with educational principles" little hope can be held out for the best administration of school affairs.

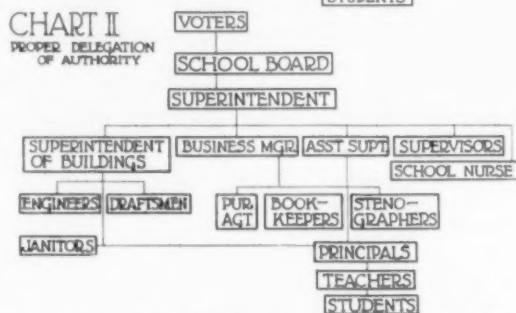
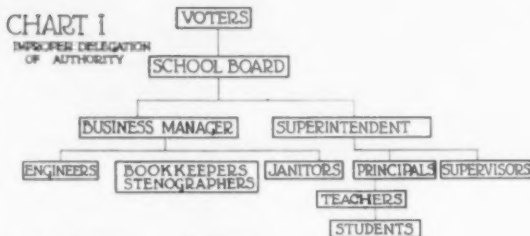
The superintendent must feel free to select, appoint, promote, and remove the business manager of his school system. Any other procedure is unbusiness-like and is likely to impair the efficiency of a school system. The same principles must be laid down for school administration as are found in the business-like lines of authority in the modern corporation. The stockholders elect the directors; the directors elect the officers; the officers appoint their subordinates. But in lines of authority laid down the president is the officer in whom final authority is lodged. The vice-president, secretary, and treasurer (and other officers if elected) are responsible to the president.

Many charters of corporations specify the powers of each officer very definitely. Treasurers and secretaries may make reports to committees of the board of directors; but, seldom is a charter found which gives an officer below the president powers exclusive of any control on the part of the president. A school board is not greatly different from a board of directors. If a school system is to follow recognized methods of defining lines of authority, it must place the business manager subordinate to the superintendent.

Chart I illustrates the wrong method of laying down lines of authority while Chart 2 shows the proper arrangement. Sometimes the work of construction is placed in the hands of an officer on a par with the business manager. In small school systems the work may consume only a portion of an individual's time. This would in no wise change the relationship of the business manager toward the superintendent.

The duties vary with each school system. The main distinction is that in some schools the superintendent of buildings is placed as a subordinate of the business manager; whereas, in other systems he is on a par with the business manager. Either method may be followed so long as both are responsible to the superintendent and not to some committee of the school board.

The Portland survey shows the following officers in the business department: (1) school



INCORRECT AND CORRECT ORGANIZATION OF ADMINISTRATIVE DEPARTMENT OF A SCHOOL SYSTEM.

clerk, (2) truant officer, (3) cashier, (4) purchasing agent, (5) superintendent of properties, and (6) janitors. Subordinates of the cashier are bookkeeper, assistant bookkeeper, checking clerk, head stenographer, assistant stenographer, filing clerk, and telephone operator; subordinates of the purchasing agent are storekeeper and delivery men; under the superintendent of properties are stenographer, office boy, chief draftsman, two draftsmen, structural engineer, heating and ventilating engineer, inspector of grounds and buildings, carpenter foremen, mechanics, supervisor of electrical and mechanical plant, plumbers, and mechanics.

Need of Accounting System

The duty of keeping a modern system of accounts belongs to the business manager. His classification of accounts should follow the standard forms laid down by the best authorities. In this particular he should be familiar with the latest classification of school accounts and should consult with the superintendent upon this matter. The efficient business manager will keep his accounting records up-to-date. His records should be in such shape that any group of taxpayers could come in at any time and, by examination of the books, tell the sources of funds, the amounts of expenditures, the reason for this and that expenditure and the present status of school funds.

The books of the business manager should be audited at least once a year by certified public accountants. Such auditors should be from some city other than the one where the business manager's office is located. A different firm of accountants should do the auditing each year. This avoids the suspicion of collusion between the business manager and the auditors. Such outside audits should not do away from any audits ordinarily made by the school board.

DISCOVERING TALENT

Indeed, the discovery and development of unusual talent is the greatest conservation movement in which the nation can be engaged. It is greater than the conservation of forests, of coal, or of oil; for all of these are important only as they minister to man; and man is distinguished from the brute creation precisely in the matter of his mentality. Otherwise he is a weakling. He is neither very strong nor very swift. He does not hear very well and his sense of smell is atrophied. If you are concerned with the maintenance and growth of our national possessions you cannot be indifferent to the greatest of them all, the resources of intelligence. The value of coal and water power and seal fisheries are indeed expressed in dollars; but no value is put upon intelligence for it is priceless. There is nothing more fundamental in the way of national resources than the sum total of available intelligence.—B. R. Buckingham, Ohio State University.

When both kinds of audits are used there is a better check upon the use of funds.

It should be the duty of the business manager to prepare financial statements from time to time as required by the board and the superintendent. At least once a year he should prepare condensed statements of receipts and disbursements that are readable and understandable by the average man "on the street." It should be his duty to see that such statements reach persons interested in the schools, and he should be ever ready to send them to those who ask for statements. By making it possible for taxpayers to have the fullest amount of information about school finances the business manager will be rendering a valuable social service; he will be building up stronger and stronger confidence in public education.

The purchasing and distributing of supplies belongs to the work of the business manager. He must know where to buy, when to buy, and what to buy. But this does not mean that his eagerness for economy should impair school efficiency. The superintendent may rely upon the art teacher for information on the quality of crayons she needs for her work. Then, if there is a choice between two crayons which will equally serve the purpose, the business manager should inform the teacher and upon her consent buy the more economical ones. Thomas' Register, or a similar list, should be a book familiar to the business manager, or to his assistant who does the purchasing. Where to obtain the best discounts, where to buy to save express and freight charges, where to obtain the most for the money must be known by the man buying school supplies.

The business manager should keep a "running" inventory; that is, he should know at any time the amount of any article on hand in the storeroom. He should carefully check the supplies as they are distributed to the various schools. His office should require requisitions for all articles issued and obtain a receipt for goods delivered. He should approve of requisitions, keeping, of course, to the plans laid down by the budget. With the advice and approval of the board, he should be empowered to incur debts to limited amounts beyond the planned expenditures when emergencies arise.

Business Manager and Budget

If the superintendent of properties is subordinate to the business manager, then, it is the duty of the business manager to see that the janitors perform their duties properly and that all mechanical work is satisfactorily done. However, the janitors, while hired by the business department should be made responsible and subject to the orders of the principals. To allow other than this would bring up the old situation in which the janitor refuses to do certain things because he "didn't have orders."

A large and valuable piece of work to be done by the business manager is that of the school budget. He should keep in his office the records of budgets for a number of years. He should prepare graphs to show the trend of school costs. Comparative statements should be made. He should plan the school budget. Of course, in doing so he must consult frequently with the superintendent upon numerous matters. And in turn the superintendent will depend upon the principals for their estimates as the principals depend upon the teachers. But the bulk of the work of preparing a budget should be done by the business manager. After its approval by the board, the business manager should keep a check throughout the year upon the expenditures of all the schools. He should see that departments and individuals are living within their allotted amounts. Not less than

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once a month he should provide a statement for the superintendent showing just how the budget is being followed. Too often in the past the superintendent has heaved a sigh of relief when the board o. k.'d his budget and then promptly forgot to see that the school system lived within that budget.

The business manager should be custodian of securities, insurance policies, contracts, and valuable papers pertaining to the schools. He should closely keep records of all bond issues, interest payments, and all financial affairs relating to the schools. The pay roll should be cared for by him. Principals need only send in reports of absences to him. Other work pertaining to the paying of teachers and other employees should be his duty. Much work not within the sphere of the principalship often has been given to principals in respect to pay rolls.

Accurate cost records in the business manager's office should enable him to prepare statements showing the cost per student hour. In this way the superintendent can begin to find out variations in costs per subject. The business manager should be ready, at all times, to furnish the superintendent with accurate records upon any of the business affairs of the schools. When such information is not available it is his duty to prepare to obtain it.

Before we can sketch the qualifications for a business manager of schools it is necessary to put the position upon a professional basis. We must define it. We must know what it is, what its requirements are, and what personal qualities a business manager should have. The account given of his work should indicate that it requires a man of high type. The mere business clerk type of individual is not desirable for the business managership of a school system. A professional man with the ideals of the schools at heart is needed.

Qualifications to be Exacted

The business manager should be a college graduate. This does not mean that many performing such duties are not doing so in a highly admirable fashion; but, in choosing a man for the position today the college gradu-

ate is preferable. A bachelor's degree in commerce should be the minimum requirement. The applicant for the business managership of a school system should have taken courses in business administration and school administration. He should be technically familiar with modern business methods and should be heartily in sympathy with school work. He should know the viewpoint of school administrators. Familiarity with finance, bonds, sinking funds, discounts, office management, economics, sociology, and educational thought is essential.

In Oakland, California, the business manager was selected from the commercial department of one of the high schools. A teacher of commercial subjects with a bachelor's degree, with some business experience and with "a head for business," should be well qualified to fill the business manager's position. Whether the applicant has had teaching experience or not, it is very desirable that he have had some business experience before assuming the obligations of such a position. Mere graduation from college does not necessarily fit one for the position of business manager of schools. Selection of men highly successful in the teaching profession for the position of business manager is to be condemned unless such individuals have had some business training and experience. Success in the schoolroom is not proof positive evidence of ability to conduct a business department upon an efficient up-to-date basis.

In Lexington, Kentucky, it was recommended that the superintendent of schools receive a salary of \$4,500 to \$5,000, and the business manager a salary of \$3,600. To obtain a man of the desirable type the salary must be made more attractive than it has been in many places in the past. To obtain a man that can be a administrator, keep things of a routine nature properly under control, get on agreeably with school officials, keep a close check upon the school budget, and elevate the work of the schools to a high plane requires a salary proportionate to the superintendent's salary as recommended for Lexington.

Schools and Sugar Beets

S. R. Logan, Superintendent of Schools, Hardin, Mont.

If you have the sugar beet industry in your community and you are in school work as teacher, superintendent, or trustee, it is safe to say that your citizenship and your resourcefulness in your profession are receiving a test. Some of the by-products of this industry may not have the sweetness of sugar nor the fragrance of the rose, by whatever name they are called. However, beet-raising helps materially to balance the crop system in irrigated sections, and, with proper restrictions, is a desirable part of farm economy.

The American public pays to the sugar industry, through the tariff, a bonus of two cents per pound. The refiners have made immense profits. The growers have not done so well; but find beets a desirable crop, when the yield is above the average, if they have sufficient child labor in their own family. Price variations are considerably mitigated by the contract in advance, which assures the grower a certain minimum price and permits him a percentage based on the price of sugar and the test of his beets.

With respect to sugar, even more than in most other commodities, the tariff protection means much more to the owners of the large machines (sugar factories), who dominate the

industry, than it does to the workers who produce the goods. The sugar factory is a natural monopoly, in its respective territory, quite as a railroad is. It is subject to no competition in the purchase of beets. Therefore, it pays only as much as may be necessary to keep enough growers on the job. Gradually, however, growers are becoming sufficiently organized in some sections to exert some influence in the making of the contract between refiner and growers. There is also some public sentiment for public regulation of the distribution between grower and refiner of the public tariff bonus.

Some of the problems incident to the sugar beet industry with which school people are directly concerned are:

1. Disproportion of increment in number of pupils to increment in school income.
2. Stunted children.
3. Irregular attendance and economic hostility to schools.
4. Heavy admixture of children of foreign language and foreign standards.

Most of the field work in beets in Montana is done by Germans, Russians, and Mexicans. The families are large, usually poor, and occasionally dependent in some measure upon

charity. They contribute little or nothing directly to school revenue. The sugar factory, which has a considerable valuation for tax purposes, is not usually located in the district or county in which the children attend school. As over ninety per cent of the cost of schools is paid by district and county taxation, the presence of the large number of beet-working children, even though they draw the small per capita state apportionment, means increasing rather than decreasing the strain upon local school finances.

Increase of the proportion of school costs paid by the state as a whole would do much to alleviate this condition. A state income tax, the proceeds distributed to schools throughout the state on an equalizing basis, will correct more evils and injustices than any other measure that has been proposed.

The child labor evil from the physical standpoint, is undoubtedly worse in beet production than in the production of other crops. This is due to the heavy toil and long hours during the beet harvest, and to the fact that the women as well as the men and children habitually work in the field, sometimes to the neglect of proper child feeding. Occasionally, children appear much older than they are and are stunted in stature. Since, normally, schools are in session during the beet harvest, when the work is particularly severe for young children, enforcement of the compulsory attendance law serves the double purpose of keeping the children in school and protecting them from overwork.

About the twentieth of September, when the beet harvest begins, you hear that, due to weather or labor conditions, an emergency exists "this year" with regard to getting the beets out of the ground. "This year" is likely to be every year.

It is desirable to leave the beets to grow as long as possible; but, no one knows how early the ground will freeze up. A fever of anxiety attacks the community. Business men implore the school board to see that the attendance officer and superintendent "go easy" for a while; they must collect their bills; the children cannot go to school without clothes and food, which are dependent upon getting beets out; adult labor is scarce or cannot be afforded; just forget the law, necessity comes first.

The result of concessions, nine times out of ten, is a straggly school attendance for six or seven weeks. A relatively large per cent of the children who are kept out fail to pass their grades. Handicapped by absence, by overwork, by lack of educational traditions, ambitions, and habits in the home, and by relative unfamiliarity with English, they tend to be looked down upon by "white children" and remain a slow-fusing lump in the Americanization melting pot.

Irregularity in attendance during harvest tends to beget irregularity throughout the year. It chronically disorganizes the work and retards every child. A conservative estimate of the financial loss to the taxpayers incident to this situation would be a sum sufficient to pay two men to take the place of every child in the beet fields during the harvest.

Since the principle of a public bonus to the beet industry has been established through the tariff, perhaps, it would be well for a county tax to be collected from all property and used to employ substitutes for children in the beet fields. It would be much less expensive to the public than irregular attendance.

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Presidents of Boards of Education

Sketches of Men Who Lead in the Administration of the American Schools.

GEORGE W. SIRRINE
Chairman, Board of School Trustees,
Greenville, South Carolina

Mr. SIRRINE was born in Monroe, Conn., December 20th, 1847; his parents moved to Macon, Ga., in 1850 and later to Americus, Ga., where he attended the common school taught by Major J. E. Rylander, one of the most efficient school men in the South.

At the age of 16 he joined the Confederate Army, and at the close of hostilities as a member of Harvey's Scouts under General N. B. Forest, passed through the trying period of ten years of reconstruction in Georgia, bread winning and doing some studying at odd times. In 1873 he became secretary of the board of education in Americus, Ga., and is the only one living of the thirteen charter members.

Moving to Greenville, S. C., in 1875, he accepted the position of superintendent of a large carriage factory, in which capacity he remained many years and when the business changed owners in 1913, was president and treasurer, at which time he retired to take up another line.

For sixteen years he was chairman of the city hospital association, and for over twenty years was president of the Neblett Free Library Association, having been among the founders of both. He was elected to the board of trustees of Greenville city schools in 1914, serving as secretary and chairman of the building committee, and since September, 1921, has been chairman of the board.

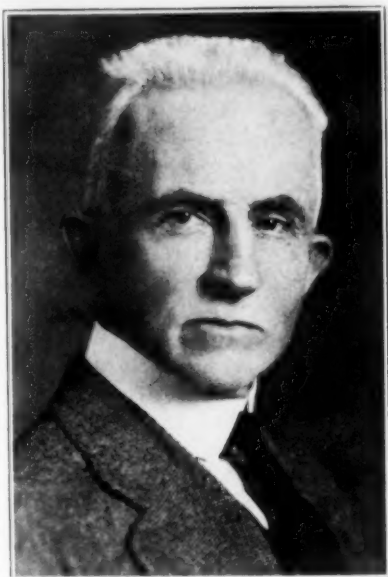


GEO. W. SIRRINE,
Chairman, Board of School Trustees,
Greenville, S. C.

Greenville has a school population of nearly seven thousand. Dr. J. L. Mann, superintendent, has a corps of about two hundred teachers, with eighteen well-equipped high and grammar school buildings. Last June 116 pupils were graduated from high school, most of whom now go to colleges.

COL. BRUCE GRIFFITH
President, Board of Education,
Wichita, Kansas

It is safe to say that no layman in Wichita had, during the last decade, been more vitally interested in the public schools than has Colonel Bruce Griffith. This deep interest has come both by inheritance and by training. Born in Bedford County, Pennsylvania, of a sturdy stock that appreciated education, Colonel Griffith completed the public schools and a preparatory school at Pleasantville and entered Franklin and Marshall College at the age of 18. He took his bachelor of arts degree from college at the age of 22 and his



BRUCE GRIFFITH,
President, Board of Education,
Wichita, Kansas.

master's degree from Eastern Theological Seminary at the age of 25.

During the world war he served in the artillery branch of the thirty-fifth division and rose to the rank of lieutenant-colonel. He graduated from the school of fire for field artillery at Ft. Sill and from the field officers' school at Ft. Sam Houston. From 1909 to 1916 he was in charge of all infantry rifle training of the Kansas troops and participated in all national competitions from 1904 until the world war. He has been chaplain of the Wichita American Legion ever since its organization.

In 1911 Mr. Griffith became a member of the board of education and has been reelected every four years since that time. This valuable service was recognized in 1923 when he was elected president.

The chief event in his term as president was the completion and dedication of the new million-dollar-high school located on a tract of 67 acres of ground entirely surrounded by the city. This project was, for ten years, one of Mr. Griffith's educational dreams. He has seen the school enrollment grow from eight thousand to eighteen thousand during his public service, and the teaching staff grow from 240 teachers to 540 teachers. He has helped to plan and erect twenty modern school buildings, and assisted in organizing, building and equipping five large intermediate schools. Three years ago two schools for atypical children were opened and a school for the deaf was opened in September.

JUDGE JOHN H. DISQUE
President, Board of Education,
Gadsden, Alabama

Gadsden is an American city which has always chosen its most prominent and successful citizens to board of education service. The president of the Gadsden school board has a most remarkable record as a school administrator. He has served as president for 29 years, and during that period never missed a meeting. Under his leadership surprising progress has been achieved.

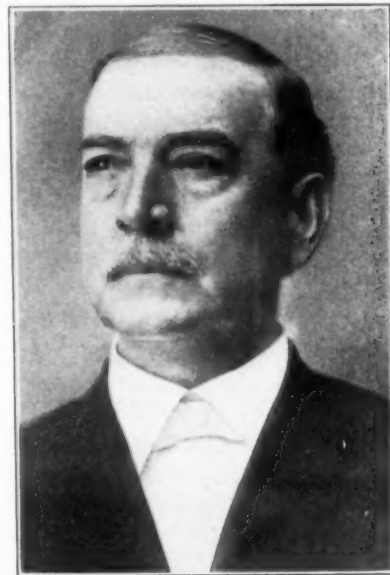
The present membership of the board consists of such persons as the Hon. W. T. Murphree, a leading lawyer and civic worker; W. T. Hollingsworth, a most successful banker; A. P. Reich, owner and manager of the principal hotel, and Mrs. W. E. Striplin, wife of a former superintendent. The selection of the members has been singularly free from political influence. This has undoubtedly helped

materially in the rapid growth and development of the school system. The board has been so successful in developing a favorable public consciousness that recently, when the people were called upon to vote \$250,000 in bonds, but fourteen dissenting votes were cast.

So indelibly has the unselfish work of Judge Disque been impressed upon the people that the first high school erected in the city (1901) bears his name.

John Disque was born on March 23rd, 1848. In private life he is the head of one of Gadsden's leading law firms. For many years he was on the bench as judge in the sixteenth judicial circuit. As a jurist he was noted for his sense of justice and accurate judicial decisions. Since leaving the bench his firm has conducted an extensive law practice.

The schools of Gadsden have grown during his tenure, from one frame building with an enrollment of three hundred, to nine brick buildings with an enrollment of nearly five thousand. During the many years of his service he has always possessed a vision of a school system equal to the best; but, always conscious of the limitations due to prejudices and inadequate finances, which had to be removed before the ideal system could function. A thirty-year period finds the schools today among the most efficient and economically operated in the state. The results of Judge Disque's great contribution to the cause of public education is seen in



JOHN H. DISQUE,
President, Board of Education,
Gadsden, Ala.

the development of the thousands of children who have gone through the public schools, and are now functioning as American citizens and building a community in harmony with the ideals and principles which guided the founders of this republic. He has dedicated his life to a field of public service; but, little appreciated by the average citizen. He has remained in the service at a personal sacrifice and with the loss of friendships; but, in the end, he must truly be classed with the few men in every community who are the real builders.

Beg Your Pardon!

In the sketch on A. L. Loving, business manager of the St. Joseph, Mo., board of education, which appeared in our October number, the statement is made that he was a graduate of Yale. The article should merely have stated here that he belonged to the class of '96. Mr. Loving does not claim honors to which he is not entitled. Hence, this correction.

State Taxation and School Support

William George Bruce.

The financial difficulties which in recent years have beset school administrators throughout the United States have commonly been attributed to the general economic disturbances which have afflicted the world. They have been regarded, therefore, as exceptional and temporary in character.

A closer study, however, reveals the fact that the general economic disturbance has only served as one of the contributory factors to embarrassed school exchequers. The general trend of American education for the past several decades was bound to call for readjustments regardless of temporary conditions. The nation's economic status, due to the world war, simply aggravated a situation and hastened the climax which was bound to come sooner or later.

Society has from year to year demanded more of the schools without adjusting the accompanying support. The home has transferred many of its obligations to the schools, the factory looks to the same source for recruiting service, and commerce is more exacting in its demands for trained help.

It will not be necessary to remind you that the average life of the American school child has been lengthened, that the total number of school days has been enormously increased, that more practical and sanitary housing has been provided, and that a high order of instructional service has been introduced.

With characteristic American enterprise the school administrator has met the new demands made upon the schools. He has amplified and improved the school plant, intensified its operations, and made a contribution to civilization that challenges all history in similar effort.

An appraisal of popular education in this country brings us to the one inevitable conclusion: The American people buy and receive more education, and at the same time exact a higher quality than they ever have since the foundation of the Republic. That appraisal leads also to another conclusion, namely, that when quantity and quality are adequately measured it will be found that we have never paid less for what we get than we do at the present time. In other words, American education costs no more today than it did at any time during the past century.

The tendency to believe the contrary is prompted by the mal-adjustments, or lack of adjustments, in the measure and method of school support. Where tax tributes are fixed as to rate and volume, the increases in revenue must depend upon the natural growth of taxable wealth. Where this wealth does not grow in proportion to the increased school demands, or is not subjected to an equitable tax tribute, discrepancies are bound to arise.

Thus, with the momentum of an expanding school service on the one hand and a stationary tax rate on the other, a climax was bound to be reached. Add to this an economic shift, whereby values are enhanced, and the gap between cost and support becomes even more widened.

We are, therefore, not merely confronted with a temporary situation, but with an enlargement in our system of popular education. This calls for new adjustments in the measure and manner of public support, and means that immediate expedients and artifices will not suffice. It goes farther. It involves consideration of the entire fiscal system and the assurance of a tax tribute that is not only equitably exacted but that will fully sustain the momentum of a

broadened school service. In brief, it calls for new conceptions and appraisements in the matter of public school support. It all hinges upon the fact that since the public demands more it must pay more.

The adjustments must be fought out in the halls of legislation, and those who would champion the cause of education must go there fully prepared for the combat. They must not only have their cause well in hand, but must also stand ready to counsel with the lawmakers and offer the solution. The legislator may listen with patience to petitions and prayers, but he also wants to be informed as how these may best be satisfied.

In approaching the subject of school costs it should not only be borne in mind that in recent years the price of all things has advanced but also that government as a whole is called upon for an enlarged service. The cost of all government, therefore, aside from the upward trend in the cost of living, is higher, and legitimately so.

This means that education is placed in a competitive attitude towards other branches of government and must assert its cause with force and fervor if it is to secure its proper share of the public funds. This clearly carries those who would plead with legislative bodies into the domain of public finance and taxation. While they cannot be expected to become an authority either on finance or taxation they must possess a reasonable grasp of the principles that govern these subjects.

Shall the Schools Have More Money?

Before a discussion of the subject of taxation, however, can consistently be entered upon, the basic question "Shall the schools have more money?" must be disposed of. This question not only invites an answer as to whether the schools shall have more money, but whether they are entitled to a larger proportionate share of the entire tax revenue exacted for governmental purposes.

The answer here, for obvious reasons, must be in the affirmative. The momentum which the American schools have attained cannot be checked and the scope they have reached cannot be curtailed. We cannot travel back to the conditions of a century ago. We cannot stultify our conceptions of citizenship, nor can we minimize the essentials of a self-governing nation, and the importance of popular education in maintaining its progress and perpetuity. Neither can we decline to meet the more complex situation of a modern day.

The expedients resorted to in attempting to reduce the cost of education have been futile. There are but few corners to cut. Extravagance has been held at a minimum. The intensity and scope which the American schools have attained, the standards of service that have been established, and the machinery that has been created for them, leave little room for sub-

stantial retrenchments. In isolated cases extravagances have been indulged in, but on the whole the financial administration of the schools of this country has been placed on a sound and reasonably economical basis.

In the attempts at economy, or rather at radical retrenchments, it is soon discovered that the larger items, namely teachers' compensation, can not safely or consistently be reduced. Nor can the necessity for more school housing be met in any other way than to build new school-houses. The standards here have been fixed and do not permit of little skimping or cutting. The same applies to the general equipment, to textbooks and supplies.

If the standards of education are to be maintained upon a high plane, the present compensation for teachers cannot be reduced. The era of low pay and cheap service is, and ought to be, something of the past. Modern society realizes that cheapness can never make for excellence and that efficiency commands its price. Commerce and industry have long recognized that fact. And it only follows that American education is equally ambitious to command the highest talent obtainable and wise enough to compensate the same adequately.

There is finally another phase which enters the subject of school costs and which has not received the attention it deserves. In widening their scope the schools have to a large extent assumed the apprenticeship labors for industrial, commercial, and agricultural pursuits.

The shift is not without its economic value. The schools can provide apprenticeships more efficiently and economically than they can be provided in factory, farm, or office. What the citizen pays in added tax tributes for an expanded school system he gains in the production efficiency of a constituency that serves him and of which he is an integral part.

If in the evolution of our national being we must exact a larger service from our schools, as we are doing, we must also stand ready to sustain them to that end. On the whole, it remains that popular education is so vital to our civic, economic, and social life that it becomes incumbent upon every state to support the same adequately, and thereby contribute its full share to the wellbeing and perpetuity of the great American Republic.

"There are those who wish the schools to be static while civilization goes on," says an educator, "but the schools will not stand still. They are going forward with the times, lighting more and more the way for greater intelligence, greater progress, and greater power."

The present program as applied to America's system of popular education is not the result of a clamor on the part of this or that group of citizenship. Nor is it the creation of some one genius who is actuated by altruistic motives.

It is the expression of an evolution which finds its inception in the ideals, ambitions, and needs of a whole people. It is the spirit of progress which recognizes conditions and necessities and deals with them in an intelligent and comprehensive fashion.

If then the question, "Shall the schools have more money?" is advanced the answer must, in the light of an accepted and established educational program and an obvious insufficient financial support, be made decidedly in the affirmative.

Finally, if we are agreed that the schools are entitled to more money then the next question is, Can the American people afford to pay more? In answer to this question let me quote



¹Abstract of an address prepared for the Illinois Educational Commission.

Edwin R. A. Seligman, the distinguished tax economist. He says: "While it is true that the educational budget has increased more rapidly than the population, it is not true that it has increased more rapidly than the wealth of the community. On the contrary it may be affirmed with little fear of contradiction, that from the economist's point of view the growth of prosperity in the United States as a whole has been so enormous as to make the proportion of educational expenditures to the real wealth of the community actually smaller than it was in the past decades."

And this leads me to a pertinent quotation from a recent paper by Prof. Fletcher Harper Swift: "Whatever one's individual attitude toward the situation may be, whether he believes it is essentially economic, or regards it as resulting largely from a lack of public and professional idealism, 'the fact remains that adequate buildings, trained teachers, and a vital curriculum can be provided only as sufficient revenues are secured and then distributed in a manner to secure results commensurate with expenditures. In other words, the educational crisis of which we hear on every hand is in its last analysis a financial crisis: In its presence we are confronted first by the demand that it be met, second by the query how.'"

Local and State Support

The schools of the land are in the main supported by local taxation. The wealth of the several communities, however, varies in a striking degree. Some need to levy a tax of one mill only in order to maintain high standards while others must exact a one hundred mill tax to maintain a minimum standard. The states, therefore, concerned in maintaining uniform efficiency throughout all units, exact a tax on wealth and distribute the same on the basis of school population, and thus aid the poorer districts.

Thus, in theory, at least, it would seem that the several units would secure sufficient support to maintain schools upon a basis of uniform rank and service. But, the theory is not sustained in practice. To begin with, the localities do not all tax themselves to either their ability or their needs. Nor is the state support in every instance sufficient to meet the needs of the poorer districts. An inflexible rate of distribution is bound to leave gaps and uncovered spots.

The ratio between state and local support varies considerably. While some half dozen states bear nearly one-half of their total school costs, the majority shoulder all the way from five to 25 per cent or less than one-third of the total burden. Approximately 75 per cent is borne by the local units, eight per cent by the counties, and seventeen per cent by the states.

Just what ratio shall apply between local and state support in order to enable reasonable uniformity of school standards must depend upon the degree of unevenness in the distribution of wealth in the individual state. Where the contrasts between the wealthy and poorer districts are more pronounced, or where the latter outnumber the former in a considerable degree, the volume of state support must necessarily be proportionately large. Where the ability of the smaller units is reasonably uniform state support becomes of less importance.

The manner of maintaining or replenishing state school funds, too, varies considerably. In 29 states a direct tax is levied for school purposes. In nineteen states it is not. Illinois is among these. Here the legislature makes appropriations for school support.

In some states a mill tax, rate specified, is provided; in others certain sums to be raised by a mill tax, rate not specified, are named; and

again, in some states a mill tax for special school projects is authorized.

Thus, when an increased school support is demanded, it means either a higher local tax rate, or a larger share out of the state school fund. If the latter is too meagre and is to be increased, where the law permits, it must come through a higher tax on all property located in the state, in both rich and poor districts.

That the states, as such, have been less responsive to pressing school needs is attested by the fact that during the past twenty-five years over five per cent of the school tax burden has been shifted from state to local units.

The introduction in certain states of an inheritance, corporation, occupation, or severance tax, or subjecting special interests to special tax tributes, has been made largely in recognition of the fact that modern wealth is expressed in many forms other than physical property. Land is the traditional burden bearer of taxes, but the protest against increasing that burden is growing louder from day to day. In any discussion of the subject it becomes obvious that a state school fund must be placed upon a stable and dependable basis. It ought not on the one hand be subject to an inflexible mill tax, or on the other to the uncertainties of a transient body of laymen constituting the legislature.

But, whether the fund be maintained out of a direct mill tax, by periodical legislative appropriations, or on some endowment basis, the authority as to flexibility of volume and disposition should and can be provided. Moreover, the fund must be sufficiently ample to perform its own function completely, and its current or periodical replenishment to that end must be assured.

In the Realm of Taxation

In approaching the problem in hand for the purpose of finding a solution the following factors and conditions come under consideration:

First. The testimony of the country at large, which is to the effect that the present tax tributes raised for the support of the schools are on the whole insufficient to maintain desired and required standards, that these tributes are inequitably exacted and unwisely distributed.

Second. The claim that the present sources of taxation are strained and will not bear larger burdens.

Third. The growing conviction that new sources of taxation can and must be discovered.



When disaster strikes, the American Red Cross is first on the job. The support of every citizen is needed during the Eighth Annual Roll Call, November 11 to 27, to help those made homeless.

In the light of the foregoing it clearly remains for those concerned in the present issue to turn to the instrumentalities and agencies that make for adequate school support. This brings them into the domain of taxation. And here they encounter an involved subject which authorities designate as the one great unsolved problem in political economy.

Yet taxation is so essentially a part of the problem in hand that it must be brought under some form of scrutiny and eventually afford the remedy that is sought. Thus, some general observations here on the fundamentals in taxation may not be amiss.

If we accept in the first instance, as we must, the testimony of the country at large that there exists a widespread shortage of funds in carrying out established school programs, then we also come immediately upon the subject of present sources of taxation.

What are the present sources? They consist in the main of realty property, or land and the improvements or building thereon, personal property, tangible and intangible. The tax experience of the world leads to the conviction that intangible personal property, consisting of credits, mortgages, stocks and bonds, cannot be equitably taxed.

To begin with, this form of property cannot always be located and, if located and taxed, means double taxation and, therefore, a dishonest exaction. Credits of this character are usually based upon physical property which has already been taxed, and to tax both the property and the evidence of property means double taxation.

The taxation of tangible personal property is also attended with difficulties. Its location is subject to shift, to market variations in values, and to some extent to sequestration. Absolute equity here can only be exerted when all such property is fully revealed and subject to correct valuation. Those who escape inflict an added burden upon those who do not. No taxing device has yet been invented which will reach personal property as a whole and subject it to an equitable and uniform tax tribute.

The failure of the personal property tax is well described by A. C. Pleydell of the New York Tax Reform Association who said: "Many cities have stopped trying to assess personal property accurately, and are content to let the assessors make arbitrary guesses so long as some amount goes on the rolls. Bargains are made with merchants, and especially with manufacturers, to under assess their property. While these methods of assessment may be less of a handicap to business than strict enforcement, still they open the way for inequality and favoritism."

This throws the main burden of taxation upon real estate and the buildings thereon, which cannot be hidden from the tax assessor. The theory here must be that the item of taxes is absorbed in maintenance cost and must be borne by the ultimate consumer, namely, the owner, the tenant, the lessee, the customer. In other words, the owners or users of the land and buildings either bear the burden or shift the same upon industry, upon commerce, upon tenant—in brief, upon the consumer.

It should be noted here that the value of property for taxation purposes is based upon its selling value, and not upon its earning power. The price fixed in a sale of property, where there is on the one hand a willing buyer and on the other a willing dealer, establishes the value for assessment or taxation purposes.

The inequities which arise out of this system of taxation are found in the various and varying earning qualities of properties of similar selling values. For instance, two store build-

(Continued on Page 127)

The Conference Method of Conducting High School Faculty Meetings

B. H. Van Oot, State Department of Education, Richmond, Va.

The interest and enthusiasm which the high school principal arouses among the members of his teaching staff depend largely upon the manner in which he conducts his faculty meetings. The coordinating of the various departmental functions, the unification of the school and community ideals and objectives, the cooperation of the entire personnel with the executive office, the quality of instruction, the *esprit de corps* of the school, and lastly, the personal success of the principal and his corps of teachers is, in a large measure, dependent upon the effectiveness of the faculty meetings. To call a number of teachers together involves considerable expenditure of time and energy, so unless the meeting is productive of results, which the teachers feel are a decided benefit to them in their work, an impression is felt that the meetings are not worth while.

Much could be said relative to the manner in which faculty meetings are conducted. The experience of the writer and the literature on the subject indicate that much time is devoted to routine, details, and announcements which could be better attended to through some form of executive bulletin, thus relieving the teachers to devote their time and energy to the performance of services which are of greater value to the school.

The object of this paper, however, is not to summarize or criticize the various methods of conducting faculty meetings, though this would be quite illuminating; but rather to point out some of the advantages of a method which the writer has found to be quite effective in dealing with groups of teachers; also, to present a few of the forms used in putting into effect the method hereinafter described.

Purpose of Meetings

The faculty meeting is a conference. The persons attending the same are, or are supposed to be, specialists having a common interest and are working to obtain a common objective. The meeting, therefore, should take the form of a conference and thus allow each conferee equal opportunity to participate; for it is only through active participation that interest and enthusiasm are developed. In this conference the principal acts, not as a dictator, but as a leader, drawing out of the members the ideals and attitudes which should be for the best interest of all concerned. By this method the principal, as leader, can direct the thought of the group along lines leading to the establishment of policies which, if put across by any other method, would appear dictatorial or autocratic and thus, perhaps, create antagonism on the part of some members of the staff. Policies established by the group, after careful deliberation, are easy to put into effect. The principal, also, has a check upon individual abilities as manifested by the extent to which they participate in the discussions. This gives him information relative to the members of his staff, which it is difficult to get in any other way. It gives the members of the group an opportunity to know each other professionally by the manner in which each expresses his views concerning the topic under discussion. The principal, as conference leader, can apply his skill in adapting his questions and suggestions to the level of abilities represented within the group, thus "bringing out" the timid, the reticent, and the apparently disinterested members. He can create situations which foster friendly relationships; he can develop confidence in one's ability by giving members an opportunity to demonstrate the same; he can

train the members of his staff in logical thinking by directing the discussion along well defined, clear cut, lines of thought; he can create a spirit of cooperation, an enthusiastic attitude toward the school work, and an ideal of job interest which are difficult to secure through any other means.

Some Possible Disadvantages

The conference method is not without its disadvantages, however. The conference leader may become dictatorial or autocratic and thus intimidate the members of the group; the discussions may be dominated by a talkative few or may wander away from the main discussion, or too much time may be spent in the discussion of non-essentials, all of which may defeat the purposes in mind. By carefully preparing an outline of the objectives to be reached, however, and by gaining experience in directing and controlling the discussion, the conference leader, that is, the principal, may lead his group toward the desired objective without loss of time or waste of energy.

The topics for discussion in any conference depend upon the needs of the school or the community. In this article, therefore, it is difficult to make many suggestions which will be applicable to all situations. A few of the topics which have been successfully developed by the conference method will, therefore, serve as a guide to the reader in determining the general nature of the subjects which may be treated in conferences. They are as follows:

1. The Health of the Students.
2. Cooperation.
3. School Spirit.
4. Extra-Curricular Activities.
5. Teacher Responsibilities.
6. Study Habits of Students.
7. Parent Cooperation.
8. Assemblies.
9. Professional Improvement of Teachers.

The above list of topics is general and only suggestive. Other topics may be added or these subdivided in order that the problems arising out of a given situation may be met.

More Than Teacher Training

It may occur to the reader that the discussion of the above mentioned subjects is more in the nature of a course of instruction in teacher training, or school administration, or any one of the several subjects that one usually studies in college and normal school. It is, but even more so. It is the application of the several methods and principles which are contained in textbooks on the subjects to specific school problems. To illustrate, the problem of athletics in a city high school of three thousand pupils is a different problem from the one found in a high school of three or five hundred students. The principles governing the control of athletics may be the same in both institutions; but the application of those principles to specific situations is a matter that can be handled best by a conference of all concerned in the situation.

Teachers' meetings are frequently called "conferences." The usual procedure consists of the members of the faculty getting together, appointing one of their members as secretary, talking over the problem in a more or less random manner, passing a few resolutions, having the secretary record the minutes, adjourning and forgetting about what took place until the minutes are read at a subsequent meeting. The writer has attended many meetings where the exception to this procedure was evident; but, in the large majority of cases, however, the usual procedure was similar to the above. The remarks of the teachers prior to

and after the meetings are a direct index to the attitudes entertained toward the meetings. Recently the writer visited a high school of approximately five hundred students. A teachers' "conference" was scheduled for four o'clock, at which the writer was to speak. In conversation with a small group of teachers, prior to the time of meeting, the following remarks were heard: "What's he going to 'take up' today?" "I wish I didn't have to attend this old conference." "He calls one of these conferences whether or not there is anything to do," and "I hope he won't keep us long." All of these remarks were indicative of the attitude of the teachers toward the "conference."

How, then, should a conference be conducted? Schoolmen, especially principals, could well benefit by the practice employed by industrial and commercial concerns or by the methods used by members of the Federal Board for Vocational Education in conducting regional conferences. The writer has yet to attend one of these conferences to find interest and enthusiasm lacking, and he has attended many. The secret of success seems to be active participation on the part of the conferees, skilful leadership, and a realization that the product of the conference will be a written report to which each feels that he has contributed. The conferees realize that they are solving problems and their work will be put in permanent form.

A Suggested Procedure

The method of procedure is a simple one. A definite, well defined objective is agreed upon. This objective is occasioned by some felt need of the industry or other situation. The conferees gather around tables supplied with writing materials. The room is equipped with a blackboard. The conference leader, who is usually a specialist in the line of work under consideration, opens the conference by stating the objective and the purposes of the conference. He, then, throws the problem open for discussion. As the members of the conference express their opinions their reactions are written upon the blackboard. At the close of the discussion these reactions are studied and weighed. The non-essentials are eliminated and the essentials are put in permanent form, which form the basis of the report. Each member of the conference serves as a check upon the others and when conclusions are reached each feels that he has contributed towards the solution of the problem. When the report is issued each feels that it is a compilation of the product of his work. The feeling that one has solved a given problem carries over into the daily work resulting in a greater interest in putting the product of his thoughts into effective operation.

In order to show more in detail how a given problem is attacked by the conference method certain analysis blanks are shown below. These blanks may be modified to suit the requirements of any situation and are here given only as a suggestive method of procedure.

Recording Findings

The first blank assumes that a conference has been held and that the responsibilities of the teacher have been listed in detail and agreed upon. Each responsibility is then considered and treated in a manner as indicated by the headings in the several columns.

In the first column the members of the conference will pool their knowledge and experiences and list the problems which are involved in responsibilities. In the other three columns

(Continued on Page 127)

Recent School Developments in Public School Architecture

George Womrath, Business Superintendent of the Minneapolis Public Schools.

The topic upon which I am to talk to you for the next fifteen minutes has been entitled "Recent Developments in Public School Architecture." It should, with greater accuracy, be entitled "Recent Developments in Public School Education"; for the reason that public school architecture—if by that expression is meant the designing of public schools to meet the needs of the public education of the youth of the nation—should be an outgrowth of the educational programs of the educators, and should not under any circumstances anticipate these programs. In other words, developments in the designing of schools should follow the developments in education and cannot precede them.

School architecture, then, is but an expression of the development of public education. Refinements in details of construction and in materials used are but corollaries of the central idea of educational utility. Under no circumstances should a school ever be built simply to gratify someone's lofty ambition to erect a costly, fine-appearing and stately monument.

In the days of our forefathers and the little red schoolhouse, a very simple program was taught. It consisted primarily of the three R's. The building and its equipment generally comprised one room, with a stove to heat it, and a few benches for the pupils to sit on. If light was needed, a kerosene lamp was used. Water was secured from a nearby well or brook. Sanitary conveniences were undreamed of.

Dr. Aley, president of Butler University, has called attention to the interesting fact that no dictionary in existence in the year 1890 contained the words "automobile," "aeroplane," "radio," and scores of other words which discovery and invention brought into our language. Thirty years ago thousands of our present-day words did not exist, nor did the inventions which have produced them. Today there is hardly a child of kindergarten age whose vocabulary does not contain a large number of these words and some knowledge of the inventions. That surely is an interesting index of the rapidity with which civilization is progressing and is likewise indicative of the rapidity with which changes in public school instruction must be made to keep pace with these and hundreds of other discoveries.

The school architect who is not thoroughly familiar with the purposes and objects for which a modern schoolhouse is to be used and its administration cannot intelligently design a well-balanced building. This intelligent handling of the architectural problem has come through a closer and more intimate cooperation between educators and architects. No longer does the architect design and build a school and turn it over to the educator for him to get along with the best way he can. The present-day procedure is for the educator to sell his educational program to the school board, after which he takes up with the architect the question of furnishing a building in which the educational program can be effectively carried out. The architect, in close cooperation with the educator, proceeds to design a schoolhouse which will meet the educational needs and which will be capable of efficient administration. He, then, prepares his plans and specifications so that the building, when completed, will be economical in cost of construction and equipment.

Radio talk broadcasted June 12 by WLAG, Twin City Radio Station, Minneapolis, Minn.

As every school building must have corridors to get from one part of the building to another; walls and partitions to divide the floor space into rooms; stairs to get from one floor to another; also office space, book rooms, boiler rooms, and other accessories, it is manifestly impossible to utilize one hundred per cent of the floor space for educational purposes. The big problem which has, therefore, confronted educators and architects has been to determine just how much floor space may be devoted to each of these subdivisions and still have an efficiently designed school building.

A national committee of representative educators and architects was appointed to make an exhaustive study of the problem. Hundreds of school plans, prepared by architects in all parts of the United States, were examined and compared, and from them a score card, or measuring stick, was worked out. This score card definitely specified that the space used for instruction shall not be less than fifty per cent of the total floor space in the building; that the space assigned to offices and administration shall not be over twelve per cent; that stairs and corridors shall not be over twenty per cent; walls and partitions not over ten per cent; flues not over five per cent; and accessories not over three per cent.

Every architect should use this score card to check the buildings he designs. Any plans which do not measure up to these requirements are either uneconomical or wasteful or inefficient.

It follows that architects the nation over are carefully studying how to increase, even by fractions of a per cent, the space devoted to instruction, and to decrease, as much as possible, the space devoted to all other activities, knowing that the reputation of their buildings depends upon the extent to which they measure up to the requirements of the score card.

Some of the developments which have resulted from this intensive study of schoolhouse design have been:

Buildings of wood construction have been replaced with fire-resisting buildings, it having been learned that the difference of less than ten per cent in cost is more than offset by the safety assured for the children and by the longer life of the structure.

Reinforced concrete skeleton construction, which lends itself readily to flexibility, has become the standard. Under this type of construction, partitions may be changed as often as required to alter the size and shape of rooms to conform to changing educational programs. Should the rapid expansion of the industrial centers of a city squeeze out the homes and render buildings of such construction useless as schools, they can readily be converted into factories, office buildings, and so forth.

As irregularities in exterior design complicates interior floor plans, the tendency is toward rectangular and square buildings. Towers, minarets, bays and other exterior embellishments, are used sparingly; for, we have learned that beauty in elevation can be secured in simpler ways.

The extravagant use of cut stone, marble, and other expensive building materials has given place to plainer and less costly ornamentation.

Corridors have been reduced to not more than ten or twelve feet, as against the old style wide, wasteful corridors, which sometimes were thirty feet in width.

Wide stairways are rapidly being eliminated by the substitution of stairways of from three feet six inches to five feet in width, assuring greater safety for the children by avoiding crowding and by giving every child the support of a hand rail. Where wide stairways still exist, they should be divided by a center rail.

Room sizes have been figured so as to utilize standard steel members and without having to resort to special structural features. This has substantially reduced the cost of construction.

Corridors, stairs, auditorium floors and lunch room floors are finished in cement instead of costly tile, terrazzo and other expensive materials.

Walls and ceilings finished in sand plaster, instead of smooth finish, give better wearing surface, are less expensive to paint, and wear longer.

A good, specially selected, double strength glass in doors and windows nets a considerable saving as compared with plate glass, and without sacrificing durability and looks.

The floors in all classrooms and educational rooms are finished in maple, making it easy to fasten seats and furniture. When these floors are properly treated they have a beautiful golden color and are easy to keep clean and far outlast floors of more expensive materials, such as linoleum, asphalt, cork, mastic, and so forth.

Baseboards, picture-moulding, blackboard frames, doors, window and door trim, etc., are generally of oak, stained and varnished. As an economic factor, it is quite worth while considering the advisability of substituting pine for oak and finishing with two coats of gloss paint. And in order to obtain the utmost economy in erection, all wood trim should be designed so as to utilize minimum dimensions and to avoid miter angles.

It was formerly thought that schoolhouse hardware had to be special and of expensive design. The present-day tendency is to use neat, inexpensive designs procurable out of the standard stock carried by all hardware manufacturers, and which can be readily duplicated as repairs and replacements are found to be necessary.

Toilet rooms with cement floors, plastered walls and cement partitions between toilets, have been found economical while serving equally as well as tile floors and walls, and marble or alberene stone partitions.

Low pressure heating plants eliminate costly pumps and complicated piping, and make it unnecessary to have a high salaried engineer constantly on duty in the boiler room.

Truly, the changes which have taken place in public school architecture have been tremendous, and there is no doubt whatsoever that there is a wide difference between the little red schoolhouse of a hundred years ago and the modern school building of 1924. Nor would we exchange the school of today for that of a century ago any more than we would exchange the electric light for a pine fagot, the modern reaper for the sickle, the twentieth century express train for the ox cart, the wireless telegraph for the foot messenger, the skyscraper for the log hut.

—A senior high school branch has been established at the Kershaw Elementary School, Chicago, Ill., to relieve the congestion at the Parker School. It was found that 300 students at the latter school were without classroom accommodations.

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Is Supervised Study a Success?

Superintendent W. A. Walls, Kent, Ohio.

In the fall of 1922, the plan of supervised study was inaugurated in the Roosevelt High School, Kent, Ohio.

Kent has a population of seven thousand and a high school enrollment of about 270. As the Kent State Normal College is located here and a high school is maintained in connection with the training school, this does not represent the total high school enrollment of the city.

A new high school building with all modern facilities had just been completed, and as the high school was transferring to the new building in the fall of 1922, it was felt that it would be an auspicious time to try out the plan.

The Roosevelt High School is equipped with every facility for working out the plan.

A library was established in the new building, which was made a branch of the city library, and a librarian who had been trained especially for this work was put on full time duty. Every student entering the first year class was required to take a number of lessons in the proper use of a library. This work was put out in mimeographed form and each pupil was required to spend the last half of some hour period during the day on this work, until such time as the librarian felt the student was thoroughly conversant with the method of using the material the library afforded.

Small book racks were made in the manual training department and placed in every room at the side of the teacher's desk. Any reference books needed are requisitioned from the library so that this material could be used during the study period without sending pupils to the library.

Students in the first year are also required to buy a small textbook on "how to study" and during the first two weeks all first-year English classes use it as a text.

The above provisions were made in the building and in the course of study. But, what of changing the teachers' concept from the old plan to the new?

In August, 1922, when the principal and superintendent decided on this plan, it was also decided that it would be necessary to do some preliminary work with teachers, new and old, who were to be in the corps during that year.

A letter was prepared and sent to each teacher telling of the new plan and enclosing a copy of the article appearing in the School Review of March, 1922, written by the principal of the Bucyrus (Ohio) High School where the plan had been used, and dealing largely with the technique of supervised study.

A new course of study had been prepared and the following article on supervised study appeared as a section of that course of study:

"The success of the supervised study plan rests almost wholly upon the individual teacher. If you enter into the plan with the spirit of cooperation and a spirit of sympathetic interest in the plan, it cannot fail.

"The technique of supervised study is fully covered in the outline given. Will teachers follow this suggested outline in planning your periods and your work with pupils?

"The books given below will be found in our library. Teachers are asked to familiarize themselves with these books.

Program for Supervised Study

(Outline of an article appearing in School Review, March, 1922)

- A. Supervised Study Period Should Aid:
 1. Pupils in mastering subject matter.
 2. Pupils in forming study habits.
 3. In acquiring ability to apply knowledge in new situations.

4. Developing qualities of good citizenship as:
 - a. Cooperation.
 - b. Initiative.
 - c. Desire to work for common good.
 - d. Suspended judgment.
 - e. Tolerance.
- B. Division of Time:
 1. Recapitulation (3 minutes):
 - a. Past experience.
 - b. Present state of mind.
 2. Statement of the business of the day (2 minutes)
 - a. Plan.
 - b. New assignment.
 3. Discussion (25 minutes).
 4. Assignment (5 minutes):
 - a. Material to be attacked.
 - b. Method of attack.
 5. Study Period (25 minutes): The Attack:
 - a. Physiological:
 1. Health.
 2. Food.
 3. Sleep.
 4. Rest.
 5. Recreation.
 - b. Physical:
 1. Light.
 2. Heat.
 3. Ventilation.
 4. Quietness.
 - c. Psychological:
 1. Attitude.
 2. Start.
 3. Time Limit.
 4. Interest.
 5. Variety of Appeal.
 - C. Technical Factors of Study:
 1. How to concentrate.
 2. How to study.
 3. Clear purpose.
 4. Vital interest.
 5. Develop a critical attitude.
 6. Habit of suspended judgment.
 7. Necessity of understanding material.
 8. Distribution of time.
 9. Accuracy and care in detail.
 10. Desire for knowledge.
 11. Love of work.

Reference List on Supervised Study

- Whipple.....How to Study Effectively.
Wiley.....Practice Exercises in Supervised Study and Assimilative Reading.
Hall-Quest...Supervised Study.
Miller.....Directing Study.
Thomas.....Training for Effective Study.

The plan was used during the school years 1922-1923 and 1924-1925.

The school day during the year 1922-1923 was a six clock-hour day. Classes began at 8:45 a. m. and closed at 12:00, allowing an entire hour exclusive of changing, for classwork. The afternoon session was from 1:18 p. m. to 4:30 p. m., making three one-hour periods in the afternoon.

The first objection was from the teachers on the length of the day; but, no change could be made here.

The most serious objection, however, in inaugurating this plan was from the parents, who objected to pupils being detained until 4:30. This had been foreseen and when patrons became too insistent a plan already in mind was put into effect. After the first six weeks a report was made, all pupils who were: first, making passing marks in all subjects; second, not under discipline; and, third, had no class the sixth period, were dismissed at 3:30. Those pupils who had a class the sixth period, at 3:30, and who were making passing marks in all subjects were dismissed at 4:00 o'clock when the recitation period was ended. From 4:00 to 4:30 only those were kept who fell behind in their subjects and who could benefit by more intensive individual attention when there were a fewer number present. This eliminated practically all complaints from the patrons.

The only change made during the school year 1923-1924 was the addition of two teachers to

eliminate the sixth period altogether, except for shop and home economics classes. This eliminated the most serious objection of the teachers.

During this two-year period constant work was done by the superintendent and principal to establish the new ideal in the minds of teachers and pupils. Checks were frequently made on teachers during the last half hour to see whether or not the time was being used for recitation instead of study as provided in the plan outlined.

Talks were given in assembly, in teachers meetings, and bulletins were issued keeping the ideal constantly before the faculty and student body. Reactions secured from individual students were given in teachers' meetings. This had a tendency to keep teachers from utilizing the time for recitation.

Teachers were also sent to visit other high schools where the plan was being used and made reports to the entire faculty.

In April, 1924, the teachers were asked to write frankly their opinion of the plan and whether or not it should be continued.

This is a dangerous thing for a school administrator to do with a pet theory unless he is willing to be guided by the results. In this case it was felt the result would be favorable to the plan; but, it was with a great deal of trepidation that it was put to the test.

Material given below was issued as a bulletin to the teachers as a result of their replies in April, 1924:

"It was not the intention, when the supervised study reports were asked from teachers, to publish a bulletin on the subject; but, so many fine constructive criticisms and suggestions were received that we believe they should be passed on to the entire teaching corps. This bulletin is the result of the suggestions gleaned from the teachers' reports and criticisms of the system, and is a valuable contribution to the improvement of the system.

"We have first listed the constructive criticisms, which were made by the teachers, and then have listed the arguments that were given in favor of the system. Regardless of what is done next year, we will have the supervised study period during the remainder of this year, and, if the suggestions in this bulletin are followed, very much could be done to improve our technique in using the system during the balance of the school year. In fact, one of the teachers suggested that it would be well for the entire high school to engage in a campaign to get across the real purpose of the supervised study period.

"Could we suggest, as a basis for an intensive effort along this line, that the teachers again read pages four and five in the high school course of study on supervised study?

The reports on the supervised study period show the teachers favor it in general; but, offer the following constructive criticisms.

Where there is a very definite answer to the criticism, which has been made, it has been my purpose to incorporate the answer to the criticism in the same paragraph with the criticism.

Constructive Criticisms

1. Time schedule not observed. Pupils do not get the thirty minutes for study.
2. Pupils have erroneous idea that work in all classes can be prepared in thirty minutes.
3. Too much intrusion on the study period time of extra-curricular activities, such as rehearsals, committee meetings for clubs, student council, athletic association and classes.

Answer: One teacher makes the suggestion that all such meetings be scheduled at 3:30 p. m. (Excellent.)

4. Too free use of hall permits which allows students to pass to another room to confer with a pupil or teacher. This interrupts an entire class. Answer: This type of permit should be eliminated entirely.

5. In one or two of the special rooms, the arrangement of furniture is not conducive to study. Answer: In such cases transfer your pupils.

6. One teacher criticises the manner in which the study period is conducted. Answer: This would suggest a more careful study of the technique of the supervised study idea. There is an abundance of material in the library. Let us use it.

7. Allotment for science falls below recommended time. Answer: No college, however, refuses admission to pupils whose schedule calls for two one-hour periods per week as ours does. Advance preparation of material, concentration of attention and intensity of effort ought to give better results. Under the old plan, two forty-minute periods in the afternoon gave only one hour and twenty minutes and this was not in the clear. Deduct six minutes and the actual difference is fourteen minutes.

8. Some pupils are using period for loafing, either in rooms or by getting excused on various pretexts. Solution: In hands of the teacher.

Summary

All these matters, except the second, are under direct control of the teacher. The second criticism is a matter of education on which we all should work. It will take a little time. Take a survey of your own classes, and for one week find out how many pupils are studying at home and what they are studying. Keep a record. This will have a very direct effect on the pupils in your classes as to their home study.

Arguments Given by Teachers for Supervised Study Plan

1. The plan properly adhered to gives better results than the old system.

2. The division of time is equitable.

3. The shortening of laboratory and shop periods increases intensity of work and has better results than slower work and less sustained interest. It is also an economic benefit in the time schedule.

4. It has been especially beneficial to students beginning the study of foreign languages.

5. It is of marked value in perfecting the written work of students of English.

6. It gives an opportunity for pupils to clear up difficulties at the proper time by asking questions.

7. It is of especial value in stenography; as, it gives an opportunity to go over new material before practice is begun.

8. It gives opportunity for help that would otherwise require a consultation period.

9. It enables the teacher to discover the pupils who have ability to concentrate and really study and to find the pupils who need assistance along this line.

10. It gives a better environment and conditions for study than many pupils find at home.

11. One of our teachers, who has seen the system in operation for two years, believes that we are steadily gaining in efficiency in the operation of the plan, and it will take time to get the ideals of the new system "over" with pupils and teachers. (One of the finest ideas advanced.)

As a result of the above survey as a matter of educational policy it was decided to continue the system during the school year 1924-1925.

Owing to a change in the Ohio school laws, it became necessary to survey the matter anew from the financial standpoint. The legislature enacted a law making it incumbent on all boards of education to inaugurate policies enabling them to operate their schools within the amounts of money apportioned for any school year without securing an advance from the money for the next year.

It was early seen that two teachers would have to be eliminated from the high school and either the six clock-hour plan again put into effect or the plan of eight 45-minute periods used.

A schedule of classes was actually worked out on both plans. It was found that, by using the supervised study plan, enough time was saved on the entire schedule to give the equivalent

of one full-time teacher to junior high school work.

The plan is, therefore, being continued during the present year; for reasons based on sound educational and economic policies. Economic policies and sound educational policies can not always be made to harmonize; but, in this case they do.

Records are taken of failures at the close of the year. Reports, made by subjects and teachers, show that during the year 1922-1923 only six per cent of pupils remaining in classes at the close of semester failed. The percentage was the same for 1923-1924. This shows that the percentage of failures in the Roosevelt High School is below the median per cent of failures for cities of this size in the United States.

Based on our experience the plan will be continued.

Are Politics Ruining Our School System?

Cora Miley.

All benefits from our schools will be lost, unless we manage some way to take them out of the turmoil of politics. Turmoil is used advisedly; turmoil from top to bottom is the result of politics in our schools.

Conditions are so bad in a few of our cities that the right sort of men seldom file for the school board. I mean by "right sort" patriotic men who know that the country's future depends on these children citizens, men who keep uppermost in their minds the children's rights and interests. This kind of man will not go through the intrigue and the chicanery of a partisan political campaign, even for the high purpose of serving the children. Besides, he knows that, even if he should be elected, which is extremely doubtful—politics being what it is—he would still be in the midst of quibbles, stratagems, and wiles among his associates and the subject for attacks from without by the politicians. So, this right sort stays out—and with honorable exceptions—the indifferent and the unscrupulous ones are elected, men who often go into the position for what they can get for themselves and their friends.

A man may not be dishonest, so far as the letter of the law is concerned, and yet he may desire a position as school director solely for the benefits that may accrue from the position. He may have books or school supplies to sell, he may write insurance, he may wish to enlarge his business acquaintance—always a business asset—he may like the sense of power the position gives, the deference paid him by teachers and supervisors, he may have friends whom he wants to help by putting them in school positions.

The question every member should ask himself is this: What are the duties and responsibilities of a member of a board of education? Is it not the welfare and education of the children rather than these things that come to members and friends incidentally? If he thinks the latter more important, if he seeks a position on the school board for any purpose except that which is of paramount interest to the children, he will cease to be interested when his purpose is accomplished and he is not likely to be of any service to the board of education.

If political wire pulling places men as members of the school board, then this same political wire pulling will be responsible for our teachers, and we shall have politicians supervising our schools instead of educators. This will result in teachers fawning on their superiors in order to hold their positions or being compelled to resort to strict discretion in expressing themselves for fear of losing them.

The right kind of superintendent is seldom employed by this kind of a board. They take a politician like themselves and he, knowing the way he came in, is kept continually on the anxious seat or is everlastingly trying to outwit those opposed to him. He sets spies about to determine who is friendly and who is not, he broadcasts silently; but, effectively that disloyalty means dismissal.

There is plot and counterplot. Every one is uneasy and uncertain. This continues until it leads to general dissatisfaction. Good teachers grow so unhappy that some begin to think of quitting the profession, others of getting positions elsewhere. Imagine children learning in such an atmosphere. It can't be done.

Nor does politics affect the teaching part of the system alone. Contracts are let, not always to the lowest bidder; but, as a reward for political influence or as a bait for it. Contractors, realizing their power, put in cheap materials with cheap labor. Leaky roofs, rattling windows, inadequate heating plants, bulging floors and the like are the result. Schools are located in inaccessible places, play grounds are bought where none are needed, on account of some "pull" with the board. Heads of departments are elected, who are not qualified to do the work, and this necessitates the employing of assistants who are competent. Competent officials are discharged and incompetent ones employed in their place in order that political debts may be paid. Protests about conditions are ignored because every employee has a "friend" on the board. When charges are filed counter charges are made which hushes the matter up. Exposure is the one thing they fear.

Conditions like this prevail in every county and city where politics control.

And we, ourselves, are responsible for it; because of our insufficient interest and knowledge of the great importance of these boards of education.

Just how important is this body? Do you know that there is no appeal from their decisions? And that they hold in the hollow of their hands the development and ideals of the children? They may place over these children, as teachers, supervisors, and principals, men and women of the most limited intelligence and we can not immediately help ourselves. And since we have compulsory education we can not even take the children out of school. The board of education builds, heats, lights and supplies the place where the children stay the most of their waking hours, and feeds them while they are there. If the site is inaccessible, the building unstable, the heating and lighting inadequate,

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Ultimate Causes of University Growth

Alexander C. Roberts, University of Washington.

The problems of caring for augmented student bodies are still acute everywhere, nor is there any indication that the rate of increase will become less. The opposite is true; for, every indication points to larger bodies of less highly selected students with divergent interests and talents far beyond any load the colleges and universities have ever been compelled to carry. Through a comparison of the number of regular full-time students at the 22 largest institutions, recorded for November 1st, 1920, 1921, 1922, and 1923, in the highly valuable compilations of Dean Raymond Walters, it is possible to grasp something of the significance of these increases upon every phase of university activity.

TABLE I. The Growth of American Universities

| Institution | Nov. 1, 1920 ¹ | Nov. 1, 1921 ² | Nov. 1, 1922 ³ | Nov. 1, 1923 ⁴ |
|--------------|---------------------------|---------------------------|---------------------------|---------------------------|
| California | 11,071 | 11,505 | 12,633 | 13,276 |
| Columbia | 8,488 | 9,793 | 10,308 | 11,530 |
| Illinois | 8,250 | 9,084 | 9,285 | 9,353 |
| Michigan | 7,437 | 8,227 | 8,703 | 8,906 |
| Minnesota | 7,156 | 7,521 | 7,911 | 8,225 |
| Ohio State | 6,846 | 7,196 | 7,241 | 7,531 |
| Wisconsin | 6,363 | 7,445 | 7,901 | 7,168 |
| Pennsylvania | 5,483 | 5,671 | 6,060 | 6,584 |
| Harvard | 4,411 | 4,670 | 5,285 | 5,462 |
| Nebraska | 5,191 | 4,521 | 4,722 | 5,221 |
| Washington | 4,277 | 4,594 | 5,053 | 5,202 |
| Iowa | 5,175 | 5,312 | 5,088 | 5,153 |
| Cornell | 4,202 | 4,463 | 4,691 | 4,853 |
| Texas | 4,575 | 5,246 | 4,647 | 4,834 |
| Boston | 4,682 | 4,815 | 4,982 | 4,805 |
| Chicago | 4,019 | 4,670 | 4,707 | 4,623 |
| Syracuse | 3,664 | 3,710 | 3,864 | 4,173 |
| Yale | 4,103 | 4,220 | 4,303 | 4,016 |
| Northwestern | 3,290 | 3,950 | 4,173 | 4,010 |
| Missouri | 3,452 | 3,649 | 3,705 | 3,576 |
| Kansas | 3,472 | 3,806 | 3,750 | 3,505 |
| Iowa State | | | | |
| Totals | 124,035 | 133,191 | 137,628 | 140,332 |

¹School and society, 13:121-128, Jan. 29th, 1921.

²School and society, 15:177-186, Feb. 18th, 1922.

³School and society, 17:197-205, Feb. 24th, 1923.

⁴School and society, 19:173-181, Feb. 16th, 1924.

In these 22 institutions are enrolled one-fourth of the college and university students of the United States. Their numbers have increased from 124,035 to 140,332 regular full-time students, and do not include the enormous groups of part-time, extension, evening school, special, and other irregular students. These institutions have received a net gain of 16,297 students in three years, or eleven per cent. An

TABLE II. Increases in Grand Total Enrollment in Ten Years at Different Universities

| Grand Total Enrollment | Calif. | Chicago | Columbia | Ill. | Mich. | Minn. | Pa. | Wis. |
|------------------------|--------|---------|----------|--------|--------|--------|--------|--------|
| 1913 | 7,071 | 6,834 | 9,929 | 5,250 | 6,008 | 3,932 | 5,968 | 5,890 |
| 1923 | 23,139 | 12,191 | 28,861 | 10,557 | 11,162 | 12,322 | 14,632 | 11,088 |

Illinois and a Minnesota, two and one-fourth Wisconsin, three Nebraskas, or four Yales have been assimilated by these 22 institutions in three years.

They who would seek for the explanation of these remarkable gains within the higher educational institutions themselves will seek in vain. The surest guide will be the statistics of the growth of American high schools during recent years. The following studies are presented to show that the universities will not return to the status of 1890; that they could not if they would. These tables have been made possible through the courtesy of the superintendents and the statisticians of the cities and states listed.

In 26 great city school systems the number of senior high schools increased from 164 in 1913 to 218 ten years later. The hold which the junior high school has gained during the ten years just closed is strikingly shown in the figures for these large city schools. Nine junior high schools at Los Angeles and Detroit were the only ones to be found in all these cities in 1913; but, in 1923, there were 162 junior high schools. Far more significant are the figures for the increase in the number of students graduated from high school in this period. In

TABLE III. Increases in the Number of Senior High Schools, Junior High Schools, High School Graduates During the Ten Year Period, 1913-1923, the Number of Pupils Enrolled in the High School Grades, and the Percentage of Total Enrollment in High School, in Large City Systems

| | Number of Senior High Schools in 1913 | Number of Senior High Schools in 1923 | Number of Junior High Schools in 1913 | Number of Junior High Schools in 1923 | 1913 | 1920 | 1923 | Number of High School Graduates in 1922-23 | Percentage of Total Enrollment in High School, Sept., 1923 |
|----------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|--------|--------|--------|--|--|
| EAST | | | | | | | | | |
| Baltimore | 5 | 5 | 0 | 10 | 692 | 761 | 1,313 | 12,294 | 11.6* |
| Boston | 15 | 15 | 0 | 18 | 1,795 | 2,362 | 3,125 | 24,065 | 17.6 |
| Jersey City | 2 | 2 | 0 | 0 | 247 | 473 | 541 | 6,939 | 13.87 |
| Newark | 3 | 4 | 0 | 3 | 313 | 585 | 787 | 8,485 | 11.05 |
| New York | 21 | 33 | 0 | 43 | 4,279 | 7,605 | 10,911 | 118,314 | |
| Philadelphia | 7 | 11 | 0 | 7 | 1,083 | 2,056 | 2,941 | 28,226 | 12.8 |
| Rochester | 2 | 5 | 0 | 4 | 302 | 451 | 603 | 7,217 | 15. |
| Washington | 7 | 7 | 0 | 6 | 879 | 979 | 1,721 | 11,772 | 16.9 |
| MIDDLE WEST | | | | | | | | | |
| Akron | 2 | 5 | 0 | 2 | 146 | 337 | 578 | 4,532 | 15.3 |
| Chicago | 20 | 24 | 0 | 1 | 2,231 | 3,503 | 5,331 | 66,792 | 13.7 |
| Cincinnati | 3 | 3 | 0 | 1 | 541 | 638 | 812 | 7,313 | 15.5 |
| Cleveland | 10 | 10 | 0 | 18 | 987 | 1,439 | 2,139 | 21,024 | 14.9 |
| Denver | 5 | 5 | 0 | 6 | 671 | 895 | 1,188 | 7,018 | 15. |
| Detroit | 5 | 10 | 1 | 6 | 808 | 1,287 | 2,165 | 20,061 | 10.4 |
| Kansas City | 5 | 5 | 0 | 3 | 640 | 965 | 1,506 | 12,400 | 20.5 |
| Louisville | 4 | 4 | 0 | 0 | 440 | 435 | 563 | 5,155 | 15.5 |
| Milwaukee | 5 | 6 | 0 | 1 | 438 | 858 | 1,027 | 9,488 | 15.2 |
| Minneapolis | 5 | 5 | 0 | 7 | 907 | 1,737 | 1,984 | 13,272 | 19.4 |
| Omaha | 2 | 4 | 0 | 0 | 254 | 480 | 790 | 7,194 | 19.4 |
| St. Louis | 5 | 6 | 0 | 1 | 635 | 1,030 | 1,476 | 15,737 | 12.8 |
| St. Paul | 4 | 4 | 0 | 0 | 406 | 563 | 731 | 5,261 | 15.6 |
| PACIFIC COAST | | | | | | | | | |
| Los Angeles | 7 | 18 | 8 | 11 | 1,088 | 1,925 | 2,879 | 26,441 | 27. |
| Portland | 4 | 8 | 0 | 0 | 440 | 1,016 | 1,471 | 10,501 | 29. |
| Oakland | 5 | 5 | 0 | 11 | 319 | 758 | 1,071 | 9,342 | 22.8 |
| San Francisco | 5 | 6 | 0 | 3 | 559 | 1,067 | 1,172 | 15,101 | 18.5 |
| Seattle | 6 | 8 | 0 | 0 | 678 | 1,204 | 1,587 | 11,405 | 23. |
| Totals | 164 | 218 | 9 | 162 | 21,778 | 35,509 | 50,442 | 485,349 | |

*White. Colored children, 9.4 per cent.

the seven years from 1913 to 1920, there was a gain of 63.3 per cent; in the three years from 1920 to 1923, the gain was 41.5 per cent. It is plain that the rate of gain is far greater since 1920 than before that year. There was a gain of 131.6 per cent in the number of high school graduates in these cities from 1913 to 1923, which means that two and one-half times as many students were graduated from high school in 1923 than in 1913. The number of high school pupils in these great cities is astonishing; here are gathered one-fifth of all the high school pupils in the United States; more remarkable, however, is the fact that in 1923 there were in these 26 cities within 35,000 as many high school pupils as there were in the nation in 1900, only 23 years earlier. Industrial, commercial, foreign-born New York City had enrolled in its high schools in 1922-1923,

In the ten years from 1913 to 1923, Pennsylvania and Massachusetts gained 109.5 per cent in high school enrollment; Virginia, leader in the educational New South, gained 197 per cent; Missouri, typical of the agricultural and industrial Middle West, gained 101 per cent; and the newer states on the coast, California, Oregon, and Washington gained 273 per cent in the same period. More significant are the gains in the number of high school graduates from 1913 to 1923; for, they constitute the chief source of supply for the student body at the universities. In the ten years from 1913 to 1923, Pennsylvania gained 123 per cent in the number of students graduated from high school; Virginia gained 251 per cent; Missouri gained 119 per cent; Washington gained 144 per cent, and California gained 158 per cent.

Table V shows the development of the high school system of a new and pioneer state. It indicates, in part, the problem of expansion to meet this growth.

TABLE V. Development of Washington High Schools

| Year | Teachers | Enrollment | Graduates |
|-----------|----------|------------|-----------|
| 1880-1890 | 16 | 320 | |
| 1894-1895 | 81 | 1,830 | 200 |
| 1899-1900 | 137 | 4,186 | 382 |
| 1904-1905 | 346 | 9,000 | 765 |
| 1909-1910 | 876 | 19,928 | 2,711 |
| 1914-1915 | 1,457 | 32,204 | 3,788 |
| 1919-1920 | 1,795 | 42,419 | 5,222 |
| 1921-1922 | 2,003 | 54,588 | 7,256 |
| 1922-1923 | 2,187 | 58,440 | 7,738 |

In this period, 1913-1923, the 26 great city systems, named in Table III, gained 131.6 per cent in the number of students graduated from high school, and in the same period, the five states, Pennsylvania, Virginia, Missouri, Wash-

TABLE IV. Increase in the Enrollment and in the Number of High School Graduates by States from 1913 to 1923

| | 1913 | 1920 | 1922 | 1923 | 1913 | 1920 | 1922 | 1923 |
|---------------|---------|---------|---------|---------|--------|--------|--------|--------|
| Massachusetts | 71,583 | 97,628 | 107,636 | 114,645 | 9,681 | 12,000 | 14,000 | 16,000 |
| Pennsylvania | 70,637 | 134,694 | 181,742 | 202,368 | 11,653 | 18,796 | 24,823 | 26,000 |
| Virginia | 16,633 | 24,191 | 41,188 | 49,450 | 1,489 | 3,102 | 4,081 | 5,233 |
| Missouri | 45,179 | 74,248 | 88,366 | 90,931 | 6,395 | 10,730 | 12,122 | 14,046 |
| California | 58,078 | 162,650 | 227,270 | 270,094 | 6,557 | 11,787 | 14,429 | 16,939 |
| Oregon | 11,280 | 22,954 | 30,196 | 32,603 | | | | |
| Washington | 27,494 | 42,419 | 54,588 | 58,440 | 3,167 | 5,222 | 7,256 | 7,738 |
| Totals | 309,904 | 558,784 | 730,986 | 818,531 | 38,942 | 61,637 | 76,711 | 86,956 |

¹Estimated from number of seniors enrolled April 1st of each year. April 1st, 1920, 13,207; April 1st, 1922, 15,514; April 1st, 1923, 17,159.

ington, and California, gained 139 per cent. This means that rural districts are gaining relatively faster than urban districts, due to the creation of union high school districts, consolidated districts, better roads with easy and rapid

(Concluded on Page 123)

Business Executives of American Schools

Secretaries, Clerks and Business Managers for Boards of Education.

HORATIO G. BENT
Business Manager, Board of Education,
Bloomington, Illinois

Mr. Bent has been one of the most active men in Bloomington school affairs. He is now serving his thirty-first consecutive year as a member of the board of education, and has served as treasurer and business manager since April, 1917, when the office of business manager was created. Under his management there has been a steady and wonderful growth in the schools of the city. He has devoted his time and energy generously to the advancement of education, and during his service the following school buildings have been erected, Franklin, Jefferson, Washington, Emerson, Lincoln, Sheridan, and the present high school building. There is now being erected on the Hawthorne School site a handsome grade building which is to be christened "The Horatio G. Bent School."

Mr. Bent has been a resident of Bloomington for the past 66 years. He came to Bloomington with his parents, when he was one year old, coming from New Orleans, La., where he was born. His father was a native of Massachusetts, and his mother was a native of New York state. He attended the Wesleyan University, from which institution he was graduated in 1879, and was graduated from the Wesleyan Law School in 1881. For a number of years he taught in the Wesleyan Law School.



HORATIO G. BENT,
Business Manager, Board of Education,
Bloomington, Ill.

Mr. Bent has a career which has few parallels for its length and devotion to educational affairs of a city. As a result of his long service, sincere interest and sane business ability the children of Bloomington are now housed in up to date, sanitary and well equipped school buildings.

WILLIAM E. RECORD
Business Manager, Board of Education,
Los Angeles, California

When Mr. Record went to Los Angeles in 1912 and joined the purchasing department of the city school system, enrollment in the schools was 68,749, but today in the capacity of business manager, he sees an enrollment of 194,465 students. In the twelve years that he has been affiliated with the Los Angeles school department he has engineered a gigantic building program, involving an expenditure of millions of dollars, until today the nation may look to the southern California city for helpful suggestions on school construction.

Mr. Record was educated in the public schools of Saratoga, New York, and while in his



W. E. RECORD,
Business Manager, Board of Education,
Los Angeles, Calif.

teens, he went to New York City where, for many years, he was connected with a large construction company. His experience there proved invaluable to him later when he was selected to supervise a mammoth construction program for the Los Angeles board of education.

During Mr. Record's term of office, three bond issues have been voted by the citizens of Los Angeles. The amounts of these bond issues have been \$9,500,000, \$17,400,000, and in June of the present year, \$34,640,000. Mr. Record plays a large part in seeing that this money is properly spent for new school sites, buildings and equipment. At one time—in October, 1923—there were 96 new school buildings and additions in process of construction. Mr. Record found time to watch these buildings and to personally inspect their progress during the construction.

Mr. Record has just one hobby—work. Saturday afternoons and Sundays are the same as any other days in the week to him. The Los Angeles high school district comprises nine hundred square miles and the elementary school district seven hundred square miles—they extend from the mountains to the sea—and Mr. Record finds that it takes seven days a week fast moving to see what's going on in all districts.



GEO. S. MILLER,
Secretary, School Committee,
Medford, Mass.

In July of the current year there were two \$600,000 high schools, two \$400,000 junior high schools, and fifteen elementary schools ranging in cost from \$75,000 to \$100,000 under construction in Los Angeles.

GEORGE STEWART MILLER
Secretary, School Committee,
Medford, Massachusetts

Mr. Miller brings to his office, as business executive for the school system of Medford, a superior training. He is a graduate of Tufts College, and served for several years as high school instructor.

His connection with the Medford school committee began in 1921, when he was elected a member of that body. In 1923 he was chosen its secretary. Mr. Miller is a member of several educational and civic bodies.

J. F. WILLS
Secretary, Board of Education,
North Little Rock, Arkansas

It would be quite as proper to say Judge Wills as to say Secretary Wills. For two years he served two terms as municipal judge of North Little Rock and is now the city attorney for the municipality.

Judge Wills became a member of the board of education in May, 1923, to fill a vacancy and a month later was made secretary. He was re-



J. F. WILLS,
Secretary, Board of Education,
North Little Rock, Ark.

elected in May, 1924. He is a native of Texas, attended the University of Arkansas, taught school for a year and was admitted to the bar in 1903.

CARRIE E. MORGAN
Superintendent and Secretary, Board of Education, Appleton, Wisconsin

Miss Morgan is an educator rather than a business executive. Yet, her position demands a dual service which she is quite capable of rendering.

After graduating from the University of Wisconsin she taught languages in the Neenah High School until 1893. A year later she was chosen superintendent of the Appleton schools. Recently she was reelected.

MRS. LENA HAYDEN ESTERLY
Clerk and Purchasing Agent, Board of Education, Lawrence, Kansas

Mrs. Esterly is a widow who, upon the death of her husband in 1901, accepted the position of bookkeeper in a bank which she filled for six years. She then became the secretary to the dean of the College of Liberal Arts and Sciences, University of Kansas. Here she remained for ten years. Since February, 1920, she has been in her present position.

The Modern Trend in the Science of Ventilation

Perry West, Newark, N. J.

Two Decades of Evolution in Ventilation

The science of ventilation began its existence with, and is still growing out of, the fact that wherever human beings assemble within an enclosed space the atmosphere within this space will become vitiated unless proper provisions are made to prevent it. It is the difficulty of determining and applying these proper provisions of prevention that has kept physiologists and ventilating engineers busy for so many years endeavoring to produce something like satisfactory results. The commonly accepted usage of the term "vitiating atmosphere" has long been the designation of those conditions which cause unpleasant, uncomfortable, or unhealthful physiological reactions; but our interpretations of the true causes and meanings of these reactions have undergone many radical changes with the progress of the art and our growth in its knowledge.

In other words the physiological effects of poor ventilation have continued to manifest themselves in much the same way; but our knowledge of these manifestations is continually changing. Among the effects, which have received the greatest amount of study and which are now generally recognized as direct results of poor ventilation, are the following: drowsiness, headache, loss of physical vitality, feeling of suffocation, temperature discomfort, brain fatigue, irritation of the membranes of throat, nose and lungs, infection, drying and cracking of and the causing of unnatural discharges from these membranes, disagreeable odors, loss of appetite, nervousness and general nausea.

It is only within the last twenty years that all of these manifestations of poor ventilation have been definitely recognized and the present era of ventilation started.

Prior to this time practically all artificial ventilation was attempted on what might be termed a quantity basis, which was based on theory that the carbon dioxide exhaled by persons in an occupied space was the primary cause of such manifestations as were then recognized. As a result of this theory it was believed that the most important factor in ventilation was the quantity of air required from outside in order to maintain an atmosphere containing not more than ten parts of carbon dioxide per ten thousand parts by volume, within any properly ventilated space. As the basic theory of artificial ventilation has long been deposed and discredited among engineers, scientists, and physiologists; but there are those who still cling to the theory, either in its original form, or in one of its many modifications.

When it was first learned that the quantity of carbon dioxide ordinarily found in even poorly ventilated spaces could not, of itself, be entirely responsible for the unsatisfactory conditions encountered under such circumstances, the possibility of other causes began to be seriously investigated.

There followed a period in which it was believed that some form of poisonous effluvia exhaled with the human breath was responsible for the vitiation of the atmosphere within spaces occupied by human beings. Later this notion was disproved and it was believed then that something might be excreted from the pores of the skin, or that small particles might be given off from the body or the internal membranes, so that the atmosphere became thus contaminated with matter which

upon decomposition formed toxins or poisons to cause the effects noted. This rather fanciful theory was soon discredited, however, and then began the real study of the subject which has finally brought us to the conclusions upon which we are now working.

The Present-Day Basic Ideas

The basic idea of ventilation today is quality rather than quantity, or the proper conditioning and distributing of a small quantity of air by efficient compact means rather than poor conditioning and distributing of larger quantities with cumbersome apparatus too expensive to be kept in operation.

The real starting point of the modern trend of ventilation in this country can be traced to the presentation by Dr. W. A. Evans of the Chicago health board, and Dr. Luther H. Gulick of the Russell Sage Foundation at the 1911 annual meeting of the American Society of Heating and Ventilating Engineers of a very formidable case against mechanical ventilation, as it was then conducted.

Prior to this time investigators such as Leblanc (in 1842); Claude Bernard (in 1857); Hermans (in 1883); Billings, Mitchell, and Bergey (in 1895); and Flugge (in 1905) had seriously questioned the carbon dioxide boggy and indicated that physical conditions of the atmosphere, like temperature and humidity, have a greater bearing upon the quality of air for ventilation than the carbon dioxide content.

It was forcibly brought to light for the first time at this 1911 meeting that the great majority of mechanical ventilating systems installed in hospitals, schools, public buildings, etc., were not efficacious and did not produce the comfortable and healthful indoor air conditions desired. A storm of complaints, which had been gathering for years against artificial ventilation, burst forth at this meeting, and as a consequence there was considerable clearing of the atmosphere. The facts that hospital patients and anaemic school children generally showed the greatest improvement in open-air rooms or in rooms without artificial ventilation, and that operation of the elaborate and expensive ventilating plants in modern buildings was rapidly being discontinued, were forcibly brought to the front.

In the discussion at this meeting it was realized that the majority of the people in this country who were vitally interested in the problems of ventilating knew very little about proper ventilation requirements. A general confession of ignorance and confusion resulted so that enlightenment and improvement were bound to follow.

One important conclusion reached at the meeting was that, while the heating and ventilating engineers had been continuously improving and refining the mechanical apparatus and were in a position to furnish most any condition of indoor atmosphere desired, the doctors and physiologists had made little or no progress in the matter of determining just what atmospheric conditions were best suited for the maintenance of proper indoor ventilation. The engineers had previously proceeded on the theory that the supplying of a sufficient quantity of reasonably clean air from out-of-doors and the exhausting of a proper quantity of foul air, with reasonable control over temperature and distribution would constitute good ventilation. The doctors pointed out, however, that this old theory of ventilation, based primarily upon dilution for the purpose of keeping

the carbon dioxide content down to a certain point, did not produce satisfactory results. "Canned air" was the term applied to ventilation, and it was found to be enervating and deleterious to the membranes of the internal air passages.

A Period of Active Study

Following a period of general dissatisfaction and lack of definite data upon which to proceed with the establishment of better ventilation, there came a period of very active study and investigation by a number of doctors, physicists, and heating and ventilating engineers. Among those whose work contributed materially in this connection to the present state of the art may be mentioned: Dr. E. Vernon Hill of the Chicago health commission, who has been connected with this development for the last fifteen years; Dr. Leonard Hill of London, who has been working on the subject for about the same period; Drs. Francis S. Lee, and Ernest L. Scott of the Department of Physiology of Columbia University, who did notable work from 1914 to 1916; Dr. Wolff Freudenthal, who has worked on the subject since 1900; Dr. James Alexander Miller, who collaborated with the New York State Commission on Ventilation; Dr. Gerhard Cooks, who also collaborated with the New York State Commission on Ventilation; Dr. Frederick W. Eastman, of the Columbia School of Medicine; G. W. Jones and W. P. Yant, chemists of the Bureau of Mines; and Dr. W. J. McConnell of the United States Public Health Service, who cooperated with F. C. Houghton of the society's research laboratory; the late Dean John R. Allen, Dean F. Paul Anderson, Jay R. McColl, E. S. Hallett and W. H. Carrier, members of the American Society of Heating and Ventilating Engineers.

Soon after this new era of ventilation was entered upon the society's research laboratory was inaugurated at the United States Bureau of Mines in Pittsburgh, and has taken a leading part in the establishment of new standards and methods of ventilation.

Some Theoretical Standards of Ventilation

The result of all of this has brought us to the present status of the art where it is no longer felt that the chemical composition of the air is the important factor but that proper ventilation depends more largely upon a number of other factors which may be stated in the order of their importance as follows:

1. Air supply.
2. Air temperature.
3. Air cleanliness in reference to its freedom from dust and other suspended matter.
4. Air sanitation with reference to its freedom from bacteria.
5. Relative humidity.
6. Distribution.
7. Air motion.
8. Freedom from odors.
9. Freedom from other injurious substances.
10. Freedom from monotony, with reference to noise and too much regularity of indoor conditions.

Air supply is still put at the head of the list for the reasons that, while it is no longer considered to be the all-important factor in ventilation, the amount of air to be supplied per person or the number of air changes to be furnished for any particular space will always be the starting point; for without air supply there can be no artificial ventilation.

¹Prepared for the Semi-Annual Meeting of the American Society of Heating and Ventilating Engineers, Kansas City, Mo., June, 1924.

The air supply is so vitally affected by the other factors mentioned that it cannot be determined independently and it will be seen that, while this item is placed at the head of the list for the reason that it is the natural vehicle upon which the structure is carried, its importance beyond this point becomes subordinate to these other factors.

Air temperature is second for the reason that it has been proved by practically all of the accredited experimenters that overheating is more detrimental to the quality of ventilation than any other one thing.

Air cleanliness is third for the reason that it has to do with human health both from the standpoint of freedom from dust and other suspended substances, which irritate and clog the air passages and from the standpoint of freedom from bacteria and other media of infection carried along with these substances which constitute the dirt in air.

Air sanitation is fourth as it also affects human health and is correlated with the third item.

Humidity and Distribution Factors

Relative humidity is fifth, not because it is of so much less importance than air supply and temperature; but because it also bears such an intimate relationship with these two items that it receives a part of its due consideration in their determination. This factor will be further referred to in connection with air supply and air temperature in connection with which other factors are involved.

Distribution is sixth for a similar reason; for while it occupies a much more important place than this position might indicate, it is so intimately connected with the effective air supply that it receives a part of its consideration therewith.

Air motion is seventh in the same way, as it too receives a certain amount of its consideration in connection with effective temperature.

Freedom from odors is eighth for the reason that while odors may become quite disagreeable and even nauseating they are seldom dangerous or permanently detrimental to health.

Freedom from other injurious substances is ninth, because these substances are so seldom found in ordinary ventilating practice and must be practically eliminated in any case.

Freedom from monotony is tenth because it has to do with the last refinements and the psychology of ventilation only.

The first two steps in the new era of ventilation were; first, the discovery and admission of our ignorance; and second, the recognition of these important factors.

The next steps were to determine what bearing each of these factors had upon ventilation and to devise some practical means of measuring and charting these effects in comparable terms. This work was undertaken by Dr. E. Vernon Hill, who assisted by O. W. Armspach, devised the Synthetic Air Chart which was adopted as the society's standard in 1920.

The Air Chart

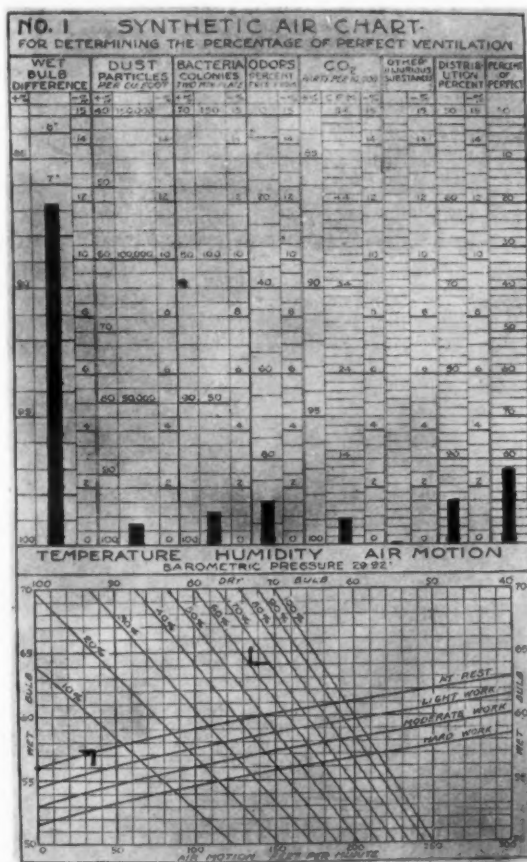
The Synthetic Air Chart takes air supply into account under the heading of CO₂. The scale for this factor is based on the assumption that three hundred parts of CO₂ in ten thousand parts of air together with the other vitiation which would accompany this quantity of CO₂ when exhaled with the human breath might produce results that would be permanently injurious to health. This is taken as the point where the quality of ventilation would drop to zero as far as this factor is concerned and the scale between this and the point of perfection, where no CO₂ is present, is evenly divided so that for each part of CO₂ in ten thousand (above that ordinarily contained in the outside atmosphere and assumed at four

parts in ten thousand) a deduction of one-third per cent is made for the particular column, or department, and three tenths per cent for the final per cent of perfection column, from one hundred per cent which represents the point of perfection.

Air temperature together with air motion and relative humidity are represented on the Synthetic Air Chart under the column of wet bulb difference. These three factors are combined for the simple reason that the sensible or effective temperature depends not alone upon the dry bulb temperature but upon the relative humidity and air motion as well. Conclusions at the time this chart was devised were: that the sensible temperature varied directly with the wet bulb temperature; that it dropped about three degrees for the first one hundred feet per minute of air motion and about two degrees for the first one hundred feet per minute of additional air motion for an adult at rest. Also that there was a rise of about one and one-half degrees in the sensible temperature for an adult between each of the following states of activity; i. e., at rest, light work, moderate work, and hard work.

The scale for these factors is based on the assumption that a wet bulb temperature of one hundred six degrees, without air motion, would soon cause permanent injury to health and this is taken as the point where the quality of ventilation for these factors would drop to zero.

Fifty-six degrees wet bulb temperature, with seventy degrees dry bulb temperature was taken as the optimum point of human health and comfort without air motion and was assumed to represent one hundred per cent quality. The scale is evenly divided between these two points so that each degree of difference between the observed wet bulb temperature (after correction for air motion and condition of activity) and the ideal of 56 degrees represents a deduction of two per cent to be made from the one hundred per cent for this column. This is taken to be equivalent to a deduction of one and nine tenths per cent per degree difference in the final percentage of perfection column.



THE ORIGINAL FORM OF THE SYNTHETIC AIR CHART.
(The record on the chart is that of a St. Louis school.)

Within the past two years these determinations have been somewhat modified by the findings of the society's research laboratory as shown in the comfort charts to be found in the society's publications.²

Some New Values

One correction is, that the sensible or effective temperature does not vary directly with the wet bulb temperature; but along lines lying about midway between the wet and dry bulb lines, within the usual temperature range for ventilation without air motion, and approaching the dry bulb lines as the air motion reaches five hundred feet per minute. Another correction is that the first one hundred feet per minute of air motion produces a reduction in the sensible temperature of about three and three tenths degrees instead of three degrees, one and seven tenths degrees more for the next one hundred feet, one and five tenths degrees more for the next one hundred feet and one degree for each additional one hundred feet per minute velocity up to five hundred feet per minute, all based on the still air effective comfort lines temperature of 64 degrees. These new values should be substituted for wet bulb temperature differences in the Synthetic Air Chart and the entire column be headed effective temperature difference instead of wet bulb difference.

Dust, bacteria and odors are grouped under one heading in three separate columns and arranged for penalties somewhat similar to those for the two factors referred to previously. The dust column is arranged so that each ten thousand particles of dust per cubic foot represents a penalty of four per cent for this particular column or department and one per cent in the final percentage of perfection column. The bacteria column is arranged so that each five colonies represents a penalty of two per cent for this particular column or department and one percent in the final percentage of perfection column. The odors column is arranged so that each ten per cent below the standard of perfection of freedom from odors represents a penalty of three per cent in the final percentage of perfection column.

There is a separate column for distribution arranged with a scale imposing a penalty of fifteen per cent for fifty per cent perfection of distribution and graduated so as to show a penalty of one per cent in the final percentage of perfection column for each three and one-third per cent of deficiency in the quality of distribution below perfection. Other injurious substances are treated in a separate column having an arbitrary scale.

Finally there is a percentage of perfection column where the difference between the sum of all the penalizations and one hundred per cent represents the composite percentage of perfection for the ventilation conditions represented.

Taken all in all this chart is a fairly satisfactory measuring medium for quality of ventilation and covers all of the factors referred to above with the exception of freedom from monotony. It needs to be simplified so that it may become more generally useful and the relative values of some of the scales may require some readjustments.

The subject of moderate air motion, within the scope of ordinary ventilating practice, needs more investigation and the effects of the different states of activity of occupants needs to be checked by the laboratory.

²Cooling Effect on Human Beings Produced by Various Air Velocities, by C. P. Yagloglou, p. 109, Feb., 1924, Journal of the American Heating and Ventilating Engineers Society. Also p. 133, Guide, 1923.

(Continued on Page 120)

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Improving Supervision in the Small School System

C. L. Hughes, School of Education, University of Oregon.

In a recent article¹ by the author it was pointed out that 66 superintendents of the smaller school systems of Washington give on the average but an eighth of their time to supervision. Theoretically, they should devote a third of their time to this important function. The causes for this discrepancy are many and varied. It is not the purpose of the present article to go into this phase of the question. One thing seems certain, however, that the ideal situation, with respect to the superintendent's function of supervision, will be attained only by gradual development and improvement of this phase of his professional service. It was further ascertained that supervision was largely concerned with visitation and this only in a very unorganized and desultory fashion. The problem, it would seem, with the great majority of superintendents in the smaller school systems especially, is how to use what time there is available for visitation, to the best advantage.

The use of the following observation outline has proved beneficial in the improvement of classroom instruction in many ways:

(1) They afford a definite basis for judging the quality of instruction.

(2) Their division into three parts enables concentration on a particular phase of classroom technique.

(3) They aid the supervisor in detecting staff weaknesses.

(4) The detection of common problems forms the basis for group discussions in teachers' meetings.

(5) They serve, through "follow-up" observations, as a "measuring stick" of progress and improvement.

A. Classroom Management

I. Opening of Classes.

1. Did work begin promptly?
2. Did teacher have trouble in gaining attention? Why?
3. Was the roll taken in the most efficient way?
4. Was the seating arrangement satisfactory for keeping order? Seats adjusted to pupils, size and grade?
5. How was the day's lesson begun? By introduction of new subject-matter immediately? By review of previous lesson? By making use of pupil's apperceptive bases for introduction of new material?

II. The Teacher.

1. Appearance: (a) Dress: appropriate, neat, attractive?
2. Manners: business like, enthusiastic, well poised, confident, sympathetic, tactful, fair minded, pleasing, stiff, too easy?
3. Voice: pleasing, well modulated, harsh, strident, shrill, distinct, clear, commands respect, monotonous?
4. Health: (a) Robust, vigorous. (b) Poor as evidenced by nervousness, lack of energy, indifference.

5. What is general attitude of class toward teacher? Why?

III. Routine Factors:

1. Physical features:
 - (a) Is the room too warm or too cool for comfort? Is the air fresh?
 - (b) Does the light come exclusively from the left? If it comes from other directions, can you note any bad effects, cross-shadows, etc.? Does inadequate lighting appear to affect the tone of the room?
 - (c) Do you note any cases of real fatigue? Do changes in method or devices affect apparent fatigue?
 - (d) In general is the room suited to that class?
2. Handling of materials, passing, etc.:
 - (a) Is there any confusion or disorder in passing to and from the board? Do pupils seem to have permanent places at the board?
 - (b) Does the teacher have a plan in dis-

tributing, passing and collecting materials? Are they most efficient?

3. Are routine factors so handled as to contribute to good order?

4. Was there any situation that should not have been routinized? Others that should have been?

IV. Discipline:

1. Does the teacher seem to be in control of the class at all times? Does she see everything that is going on? Does she instantly check any tendency toward disorder? Does she seem confident and master of the situation?
2. Does she stand or sit while hearing the recitation? Does she move about from time to time? With what seeming effect?
3. Does she pay attention to the whole class, or merely to the pupil reciting?
4. Are any pupils engaged in activities not connected with their assigned work? Is it willful and intentional? Do they disturb others? What is the source of disturbance? Does disorder tend to spread? Does it disturb class as a whole?

5. Is correction when necessary swift and sure, though based upon objective, impersonal considerations?

6. What is the cause or causes if the class is disorderly, inattentive or the work drags?

7. What are the factors conducive to a smoothly running class?

8. What methods does the teacher use to keep all busy during entire period?

9. How does she make all responsible during the entire class period?

V. Waste in Management:

1. Is the blackboard used properly as evidenced by:
 - (a) Can the work be seen by practically all?
 - (b) Front board used in preference to side boards?
 - (c) Are many sent to board at once?
 - (d) Do they have ample space?
 - (e) Is writing clearly and neatly done?
 - (f) Do they pass promptly and begin work at once?
 - (g) Is individual work brought to attention of whole class?
 - (h) Are mistakes carefully and emphatically corrected?

2. Is there lack of definite plan for conducting the lesson as evidenced by:

- (a) Does the teacher seem to have a clear aim or set of aims in the lesson?
- (b) Does she keep to these or is there wandering and attention to non-essentials?
- (c) Is lesson properly concluded by summary or is it broken off hurriedly?

3. Is there waste because of:

- (a) Vague statements on part of teacher?
- (d) Does she permit such statements to be passed by when made by pupils?
- (c) Does she make general and abstract statements without concrete and definite illustrations?
- (d) Do pupils make such statements without requiring them to give examples?

4. Is there a proper balance between pupil and teacher participation as suggested by these points:

- (a) Is the class kept mentally alert by all being called upon frequently or does teacher consume most of the time?
- (b) Are the pupils' recitations too long?
- (c) Are pupils drilled singly or the class as a whole?
- (d) Is time wasted by resorting to "pumping questions" to drag information from pupils?

5. What are the greatest sources of waste as you have observed them?

VI. Summary and Conclusions:

1. What are your general impressions of the recitation as a whole?
2. What are the outstanding characteristics in the conduct of this lesson that exhibit mastery of the situation?
3. Upon what theory or scientific fact are your recommendations for improvements based?

B. The Technique of Instruction: The Lesson as a Whole

I. Presentation of Subject-Matter:

1. Does the teacher "set the stage":

- (a) By calling up related ideas, or by supplying necessary background for interpreting the new material?
- (b) By arousing the proper mental set, either through use of pupils' instinctive interests

or by means of the intrinsic worth of the subject-matter?

2. Are the aims of the lesson kept before the class? Are they suitable for this subject and class?

3. Does the teacher have the subject-matter well in mind? Is it well organized? Is it adapted to the needs of the class in character and amount?

4. Is the lesson type justifiable for presentation of this kind of material? Why?

5. Is the lesson properly summarized at the close by:

(a) Quick review of salient facts, principles, or rules?

(b) Asking questions which bring out comparisons or contrasts of material studied?

(c) Calling on pupils to make applications of facts, principles or rules learned?

(d) Asking questions which organize and emphasize the important points of the lesson?

6. Is the aim of the lesson accomplished?

II. Questioning:

1. Does teacher manifest ability to word questions clearly and concisely? Avoid series of short, fragmentary, suggestive questions?

2. Is there quick and easy adjustment to legitimate interruptions, disposing of them or following them up with clear-cut, direct questions? Is independent questioning by pupils encouraged?

3. Is the teacher quick to see when her language or construction is confusing to the class? Can teacher re-word statements quickly?

4. Are thought, drill and test questions used in right proportions? Directed at proper material? Is the pace varied? Do they hold class interest and attention?

5. Are questions distributed over the class fairly well? Suited to individual differences?

6. Avoid answering questions by teacher? Avoid repeating them except in legitimate cases? Insist on clear, intelligent answers? Avoid repeating pupils' answers?

7. Are questions such as will bring out the essential purposes of the recitation:

- (a) Interpretation of facts learned.
- (b) Criticism of conclusions studied.
- (c) Supplementation by pupil experiences.
- (d) Application of facts learned to phenomena of daily life?

8. If pupils are not well prepared what did teacher do?

III. Assignment:

1. Is skill exhibited in placing different types of assignments where they belong in the period?

(a) Those that do not depend on day's lesson at beginning of period?

(b) Avoid getting caught at end of period with unfinished or hurried assignment?

(c) Exhibit skill in seizing opportunities for assigning that arise during course of recitation? Can the teacher slip back into recitation with a minimum of disruption?

2. In developing main topic or problem does the teacher:

(a) Recall old knowledge clearly and slowly enough for all to get it? Is the statement of the aim or the development of it such as to arouse interest and effort?

(b) Set clearly before pupils any directions to be followed or models to be initiated?

(c) Make brief exact statements? Avoid vague, general statements as, "find out all you can about," "discuss fully" or "read carefully pages so and so?"

(d) Does the assignment seem to grow out of the lesson?

3. Does the teacher give sufficient and appropriate study hints and aids?

(a) Such as to aid pupils in studying without making him dependent?

(b) Which make for reflective thinking and mastery of ideas rather than mere memorization of words?

(c) Are the sources referred to sufficient, well chosen, available and clearly designated?

(d) Do they clear up or prepare for difficulties that will be met?

(e) Are outlines used, either prepared in advance or developed in class? Are they of such nature as to train pupils to weigh evidence and organize material? Avoid useless copying by pupil of outlines and references which by nature are fixed?

4. Is a check finally made to see that all are clear by:

(a) Asking pupil or group to repeat the aim of the lesson and tell briefly what is to be done?

(b) Encouraging the asking of questions to

¹Hughes, C. L. The Functions of the School Superintendent in Theory and Practice, American School Board Journal, October, 1923.

²See Colvin, S. S. Introduction to High School Teaching, Ch. IV.

clear up difficulties or misunderstandings?

(c) Discrimination between answering questions for the slow pupil who failed to get it, and the indifferent, lazy pupil who was inattentive?

5. Is the principle of individual differences made use of, by:

(a) Avoiding assignment of too much for most pupils? Too little?

(b) Wherever possible is there plainly a minimum-essentials requirement which all can get so the slowest may have satisfaction of completing it?

(c) Is supplementary work for brighter ones skillfully introduced, so that all are kept busy?

(d) Does teacher avoid a realization by the pupils of this seeming discrimination of assignments?

IV. General Considerations:

1. What is the teacher doing to develop expression, confidence, personal force on part of the student?

2. What could the teacher have done to render the recitation more effective?

3. What was the effect of the lesson on the pupils' interest in the subject?

4. In what phase of teaching was the teacher strongest:

(a) Application of method?

(b) Use of devices?

(c) Management?

C. The Technique of Instruction: Methods and Processes

I. Types of Instruction.

1. Telling or lecturing:

(a) Could material have been more effectively presented by means of assigned references or discussion, or other method?

(b) Was the material told, well organized?

(c) Was the telling done vividly and effectively? Was there attention and interest?

(d) Was advantage taken of opportunities to illustrate main points on blackboard or by means of familiar examples or by applications? Was this done effectively?

(e) Did teacher waste time by purposeless digressions?

(f) What devices or peculiar means were used to secure or hold attention or to increase effectiveness?

(g) How did teacher tell whether class was getting the material being given?

(h) Did the pupils take notes? Should they have done so?

2. Development of rules, principles, definitions, general ideas and explanations:

(a) If rules, principles, definitions, or general ideas were taught in this class, were they given by the book or teacher or developed in class? To what extent did pupils do the thinking?

(b) What efforts did teacher make to prevent jumping to conclusions or clinging to previously formed conclusions?

(c) To what extent was previous experience and knowledge of pupils used as apperceptive basis?

(d) To what extent was irrelevant material or wandering permitted?

(e) Were pupils critical of opinions and recitations of others?

(f) Were rules and principles developed in class applied to sufficient instances to assure complete understanding and retention?

(g) Was there a logical sequence of presentation?

3. Drill:

(a) The procedure of drill for skill:

1. Did pupils understand perfectly what they were trying to do? Were instructions or copy to imitate clear?

2. Were incorrect movements promptly weeded out? Did teacher assist pupils to see errors? Were these aids given in a helpful manner?

3. Was drill snappy? Was it motivated? How? Were any devices for stimulation of interest used? Were they effective? Why?

4. Did the drill continue long enough? Too long? Why?

(b) Drill for memory or retention:

1. Was material understood by class?

2. What provisions were made for clear and vivid impressions, summaries, visual aids, association devices, outlines, novel means?

3. Were important facts singled out for permanent retention? Too many? Not enough? Wrong ones?

4. Were there a sufficient number of repetitions? Were repetitions made with high grade of attention? Concert repetitions?

4. Appreciation.

(a) Did the teacher take advantage of her opportunities to develop appreciation of things which pupils should learn to appreciate?

(b) Do you think the class appreciates the

subject they are studying? Why or why not?

(c) What errors were made on the part of the teacher in attempting to develop appreciation?

(d) Were pupils "pressed" for an expression of appreciation or lack of it?

(e) Did pupils enjoy the time spent in the appreciation teaching?

5. Expression work (composition or other reading in class, debate, dramatization, etc.).

(a) Was the audience situation created?

(b) Was the material new to class?

(c) Was the pupil interested in what he was to express?

(d) Were criticisms forthcoming? Sincere? Thoughtful?

(e) What method of criticisms did teacher use? Of encouragement?

6. Review work:

(a) Did the review serve to organize the work? To emphasize the important points? To test the pupils? To locate and re-teach points of weakness of class? For which of these purposes did the review seem to be given?

(b) Did the review seem to develop memory only, or memory plus complete understanding?

7. Supervised study:

(a) Laboratory work:

1. Were materials and equipment arranged for and gotten ready in advance?

2. Did pupils know how to proceed without loss of time?

3. Were pupils working with purpose and interest or just to get through the required experiment?

4. Was demonstration work by teacher used? Was procedure effective?

5. Would demonstration work by teacher have served the purpose better?

6. Was work properly supervised by the teacher? How?

7. What kind of notebooks were being kept?

(b) Literary work:

1. Were pupils learning how to study?

2. Were slower pupils given special help?

3. Did the teacher investigate work of pupils or help pupils only as they asked for help?

4. How much time was used in supervised study?

II. The General Recitation Processes:

1. Attention and interest:

(a) What per cent of class were usually fol-

lowing the work closely? What per cent giving no attention?

(b) Was there good attention or poor attention? Was it due to: teacher's manner, poor presentation, poor arrangement, hygienic conditions, distractions, habits of attention, fear of teacher, personality of teacher, etc.

(c) What appeals were made to instincts—curiosity, rivalry, construction, self-activity, fear, play, vanity, self-expression? To what extent was the problem-solving attitude maintained?

(d) What opportunity was afforded for "socialized-recitation" or group-idea?

(e) What outstanding features of "attention-keeping" were there?

(f) What use was made of illustrative or visual material to secure high type of attention?

(g) What seemed to actuate the pupils to do their work—sheer interest, mediate interest of the type of specific need, or generic values, of a combination?

(h) How might better attention have been secured, or more interest in work aroused?

(i) What means if any was used to vitalize subject-matter, e g., to relate it with life situations?

(j) Were there preventable distractions? How prevented?

(k) How did teacher handle inattention?

2. Provision for individual differences:

(a) Does teacher favor bright pupils?

(b) Does teacher take too much time in teaching slow pupils?

(c) Is any provision made for bright pupils to work according to their ability?

(d) What provision made for helping slow pupils?

(e) What could have been done that was not, to provide for these individual differences?

(f) Was there any indication that teacher adjusted her teaching to any peculiarities of temperament of any pupil or pupils?

3. Results:

(a) Did pupils seem to have prepared lesson? If not, what did teacher do?

(b) Did pupils understand work covered during the day?

(c) Will pupils remember the things they should remember?

(d) How nearly did teacher accomplish aim of lesson?

High School Salaries in South Dakota

J. F. Hines, Superintendent of Schools, Wolsey, S. D.

Much has been said in the agricultural districts of the Northwest regarding the increasing school costs. Many have been inclined to cut the salaries of teachers in an effort to lower taxation, regardless of the fact that the purchasing power of the dollar should be considered. The data given below has been collected from the entire state. Just preceding the war, according to leading statisticians, the dollar bought approximately what 48 cents would in 1923. Comparing this value with the salaries paid it would be seen that salaries have not increased out of proportion to other commodities.

The schools have been studied in groups which would more nearly permit careful comparison and which would be governed by conditions much more the same.

AVERAGE SALARIES IN SCHOOLS ENROLLING LESS THAN 50.

| Year | Teachers | Average Salary | Principals | Average Salary |
|---------|----------|----------------|------------|----------------|
| 1913-14 | 91 | \$ 584 | 129 | \$ 855 |
| 1914-15 | 75 | 608 | 70 | 898 |
| 1915-16 | 24 | 700 | 11 | 1086 |
| 1916-17 | 27 | 665 | 13 | 1121 |
| 1917-18 | 58 | 686 | 25 | 1192 |
| 1918-19 | 67 | 846 | 28 | 1320 |
| 1919-20 | 81 | 1072 | 43 | 1533 |
| 1920-21 | 92 | 1500 | 41 | 2085 |
| 1921-22 | 93 | 1477 | 43 | 1967 |
| 1922-23 | 135 | 1419 | 59 | 1971 |

Per Capita Cost of Instruction

| Year | Average of all Schools | Average for Schools Enrolling less than 50 |
|---------|------------------------|--|
| 1913-14 | \$50 | \$ 59 |
| 1914-15 | 48 | 56 |
| 1915-16 | 46 | 68 |
| 1916-17 | 44 | 58 |
| 1917-18 | 53 | 70 |
| 1918-19 | 60 | 90 |
| 1919-20 | 70 | 107 |
| 1920-21 | 90 | 143 |
| 1921-22 | 93 | 136 |
| 1922-23 | 91 | 153 |

Note: Per capita cost is used throughout this study as the cost per student, determined by dividing the total salary cost for the year by the total enrollment for the year.

AVERAGE SALARIES IN SCHOOLS ENROLLING MORE THAN 49 AND LESS THAN 100

| Year | Teachers | Average Salary | Principals | Average Salary |
|---------|----------|----------------|------------|----------------|
| 1913-14 | 60 | \$ 631 | 26 | \$ 972 |
| 1914-15 | 81 | 629 | 24 | 1008 |
| 1915-16 | 70 | 677 | 18 | 944 |
| 1916-17 | 77 | 691 | 28 | 942 |
| 1917-18 | 88 | 737 | 23 | 1108 |
| 1918-19 | 132 | 870 | 24 | 1340 |
| 1919-20 | 149 | 1078 | 35 | 1360 |
| 1920-21 | 176 | 1502 | 49 | 1998 |
| 1921-22 | 193 | 1516 | 60 | 2124 |
| 1922-23 | 207 | 1480 | 75 | 1967 |

Per Capita Cost of Instruction

| Year | Average of all Schools | Average for Schools Enrolling more than 49 and less than 100 |
|---------|------------------------|--|
| 1913-14 | \$50 | \$36 |
| 1914-15 | 48 | 40 |
| 1915-16 | 46 | 40 |
| 1916-17 | 44 | 37 |
| 1917-18 | 53 | 50 |
| 1918-19 | 60 | 56 |
| 1919-20 | 70 | 68 |
| 1920-21 | 90 | 84 |
| 1921-22 | 93 | 90 |
| 1922-23 | 91 | 90 |

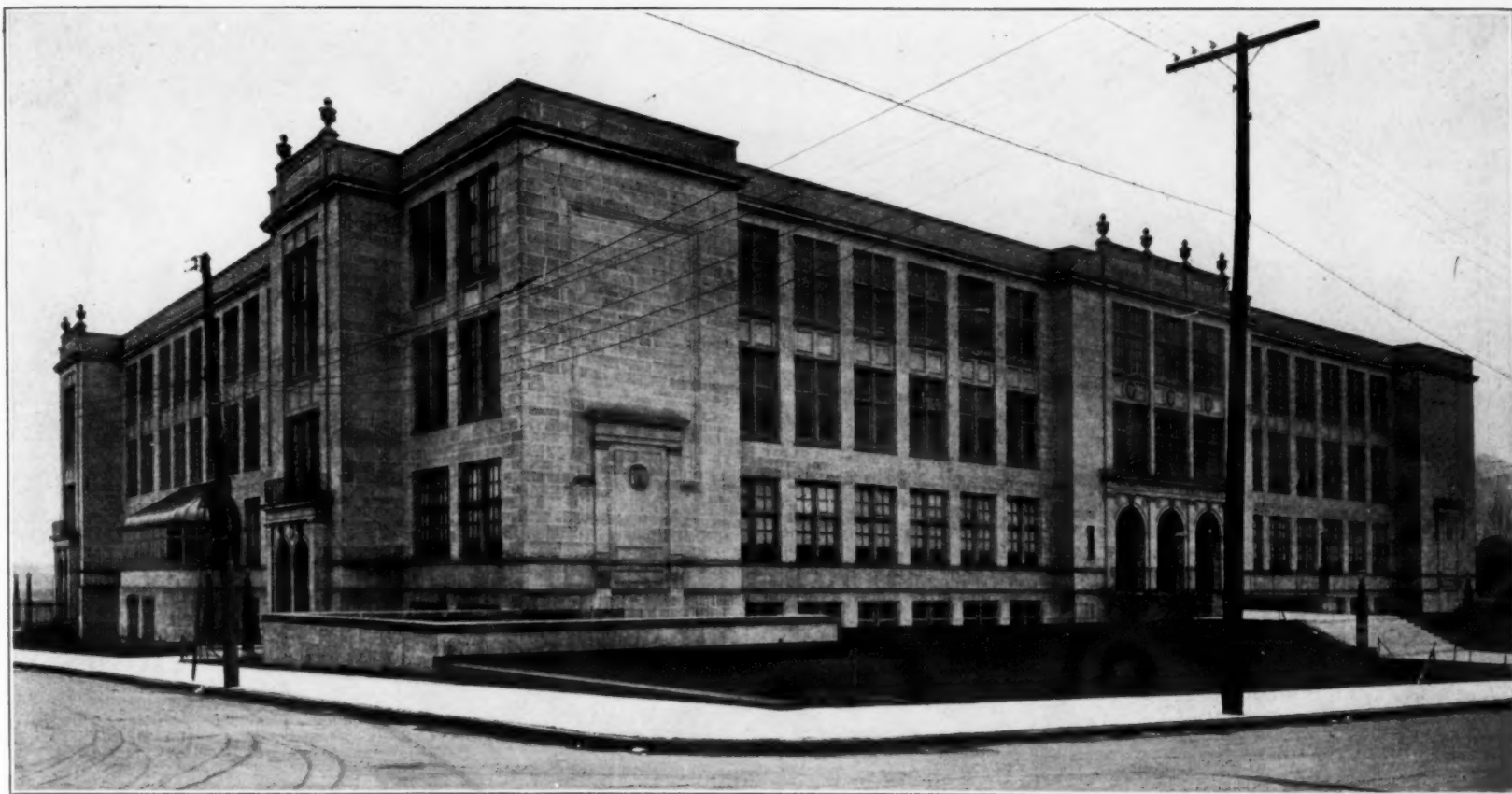
AVERAGE SALARIES IN SCHOOLS ENROLLING MORE THAN 99 AND LESS THAN 200

| Year | Teachers | Average Salary | Principals | Average Salary |
|---------|----------|----------------|------------|----------------|
| 1913-14 | 74 | \$ 660 | 13 | \$1074 |
| 1914-15 | 90 | 751 | 15 | 1020 |
| 1915-16 | 78 | 793 | 12 | 1089 |
| 1916-17 | 90 | 790 | 14 | 1021 |
| 1917-18 | 73 | 826 | 11 | 1193 |
| 1918-19 | 84 | 905 | 9 | 1206 |
| 1919-20 | 88 | 1083 | 13 | 1423 |
| 1920-21 | 124 | 1528 | 18 | 1928 |
| 1921-22 | 195 | 1547 | 30 | 1909 |
| 1922-23 | 223 | 1506 | 39 | 1827 |

Per Capita Cost of Instruction

| Year | Average of all Schools | Average for Schools Enrolling more than 99 and less than 200 |
|---------|------------------------|--|
| 1913-14 | \$50 | \$46 |
| 1914-15 | 48 | 41 |
| 1915-16 | 46 | 39 |
| 1916-17 | 44 | 40 |
| 1917-18 | 53 | 48 |
| 1918-19 | 60 | 50 |
| 1919-20 | 70 | 51 |
| 1920-21 | 90 | 82 |
| 1921-22 | 93 | 82 |
| 1922-23 | 91 | 75 |

(Continued on Page 128)



WESTINGHOUSE HIGH SCHOOL, PITTSBURGH, PA.

Geo. S. Orth & Bro., Architects.

Pittsburgh's Huge Building Operations

Conducted for the Board of Education Under the Direction of Mr. James Bonar, Superintendent of Buildings.

The school building operations engaged in by the board of education of Pittsburgh, Pa., since 1921, have assumed huge proportions. Some idea may be secured when the following new building projects, together with the expenditures which attended them, are enumerated.

At the close of the war the board hesitated somewhat in its building plans, owing to the high cost of labor and materials. After these had become more steady and substantial reductions were no longer in prospect the operations were undertaken with considerable energy.

| | |
|-------------------------------------|---------------|
| Greenfield Elementary | \$ 602,819.00 |
| Perry Elementary | 550,785.00 |
| Langley High | 653,267.00 |
| Fairywood Elementary | 40,929.00 |
| John Morrow Annex No. 2 | 95,961.00 |
| Gladstone Addition | 187,418.00 |
| South High Junior-Senior Annex... | 581,903.55 |
| Beechwood Elementary School Add. | 415,262.00 |
| Peabody High School Addition | 627,826.40 |
| Halls Grove School | 156,349.00 |
| Westinghouse High School | 1,721,105.30 |
| David B. Oliver High School | 841,774.00 |
| Chatham Elementary School | 231,325.00 |
| Boggs Ave. Elementary School | 180,951.00 |
| South Hills High School | 961,143.00 |
| Alteration to Present Building | 39,215.00 |

Total\$7,888,033.25

The building operations are entirely within the control of the board of education. It maintains a building department which is headed by James Bonar in the capacity of superintendent. Mr. Bonar enjoys a well deserved reputation for great efficiency. The assistant superintendent of buildings is W. H. Harrold, and the supervisor of new construction is C. B. Allison.

The Westinghouse High School

The board of education of Pittsburgh, Pa., has included in the sixteen new structures erected and under way, four high schools, of which the Westinghouse is the largest.

This structure has cubage space of 3,905,564 feet, which is a million feet higher than that of the next largest school.

It is arranged in three stories, ground floor, and basement. The auditorium is placed in the center of the building on the first and

second floors with classrooms placed on all sides. It will also be noted that the gymnasiums for both boys and girls, as well as the swimming pools, are placed in the basement. The boiler and fan rooms are also on this floor. The gymnasium space extends into the ground floor. The dining rooms as well as a series of special rooms are also placed on this floor.

The cost of the general construction is \$1,312,923 or .3361 per cubic foot. The heating and ventilating runs to \$214,773 or .0550 per cubic foot. The plumbing cost is \$85,993 or .0219 per cubic foot, and the electrical work runs up to \$57,717 or .0148 per cubic foot.

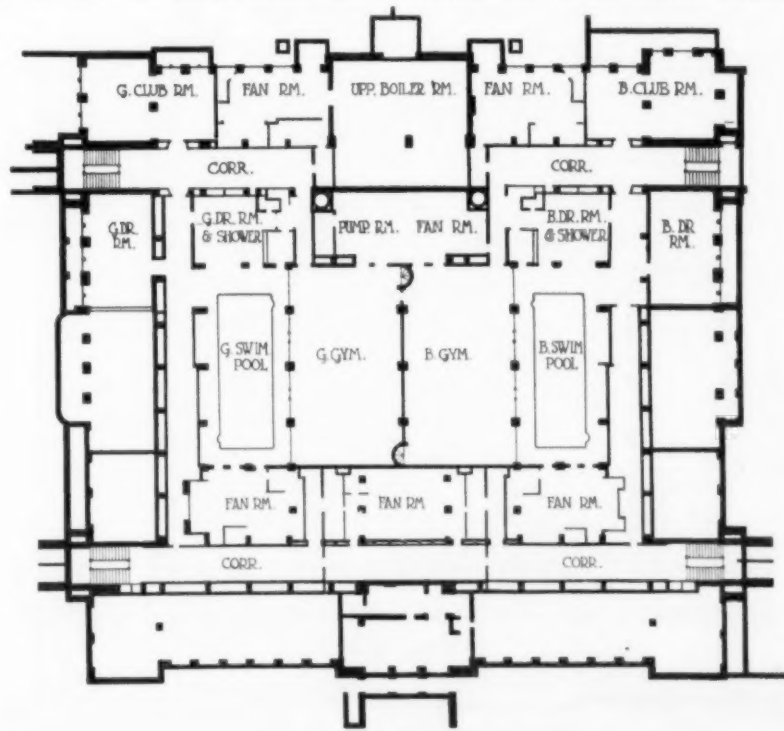
The construction and equipment cost totals the sum of \$1,671,408 or a cubic foot cost of .4278. Added to this are the so-called land-

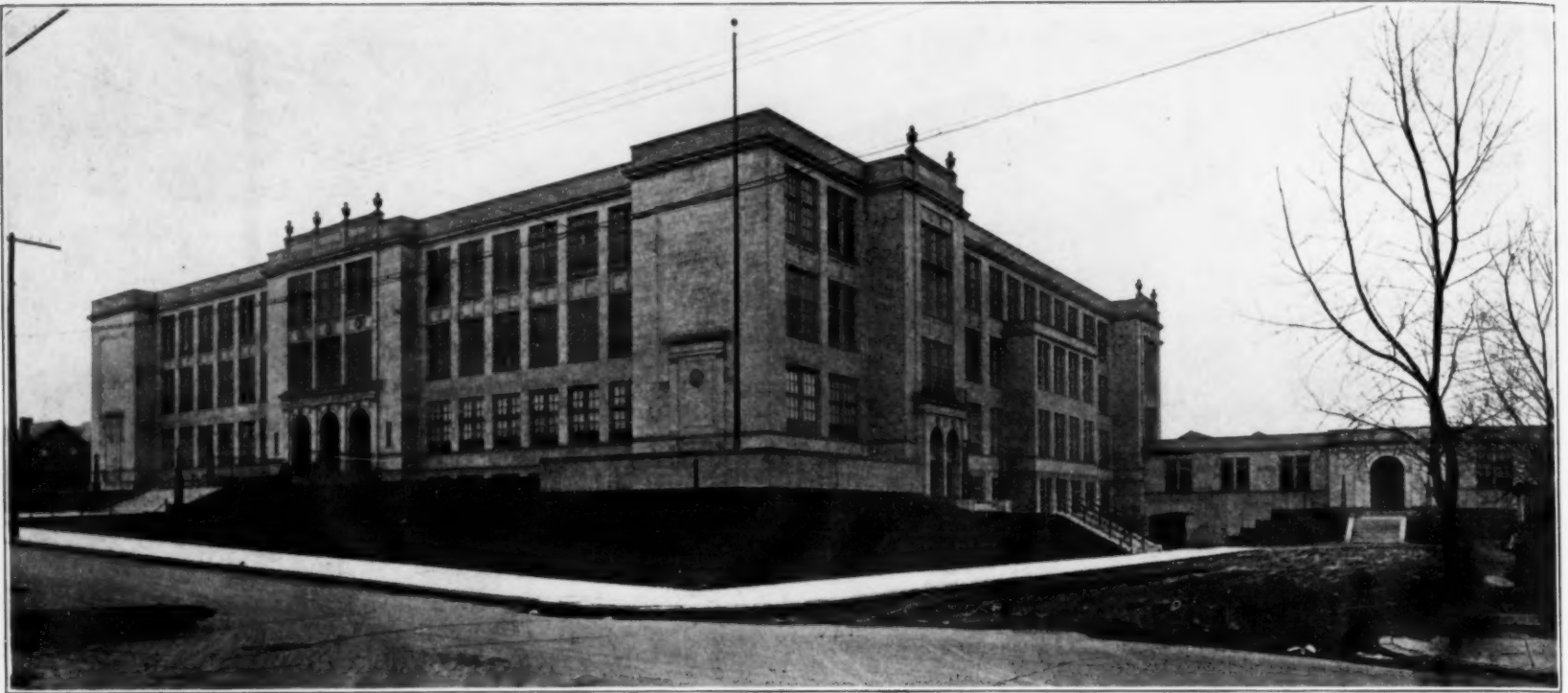
scaping and abnormal foundation which brings the grand total to \$1,721,105. The architects are George S. Orth and brother of Pittsburgh.

The Perry School

This structure was completed in 1923. It contains twelve classrooms. There are, in addition to these, kindergarten, domestic science, and general office suites. Aside from the library, auditorium, gymnasium and swimming pool, there are rooms for drafting, bench work, lectures, nature study, music, art, teachers, application, boys' play, girls' play, voting, receiving and storage.

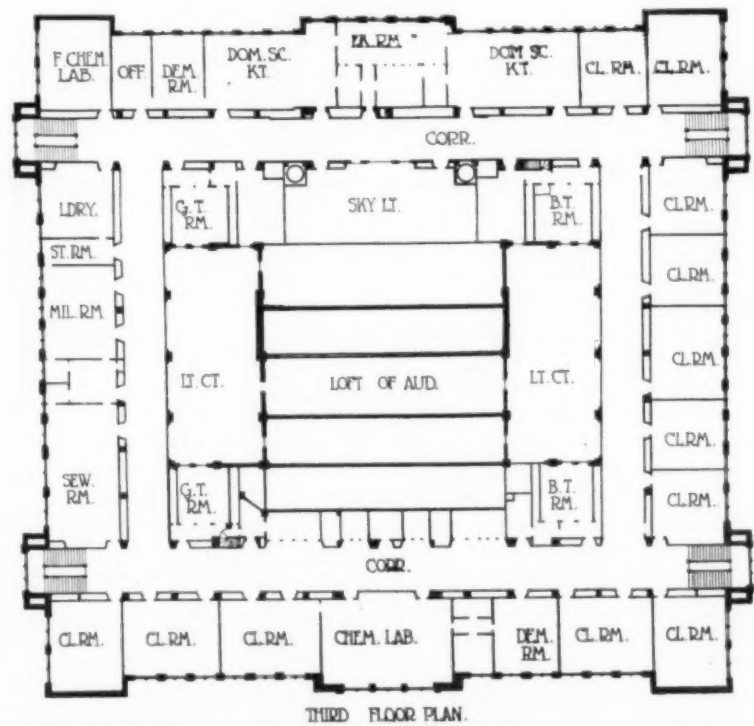
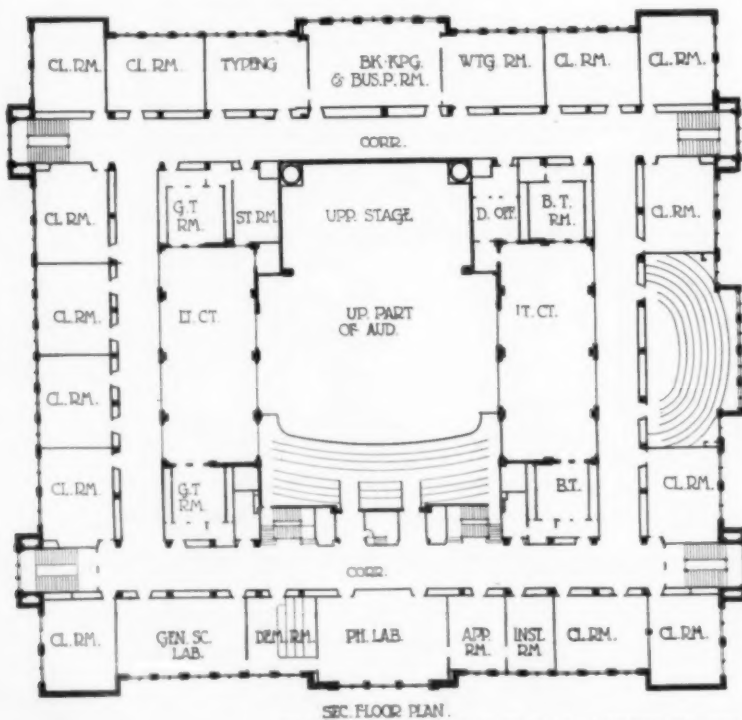
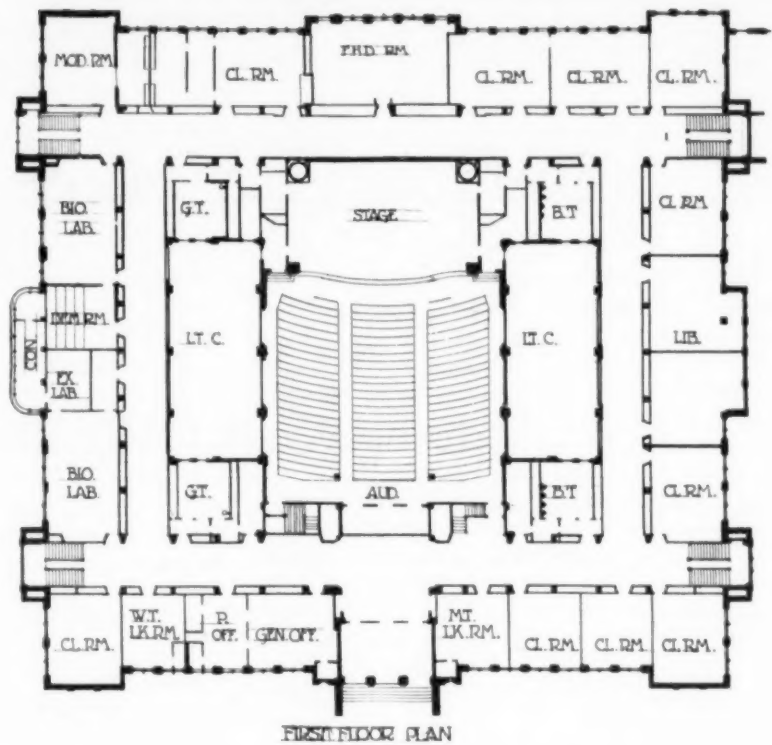
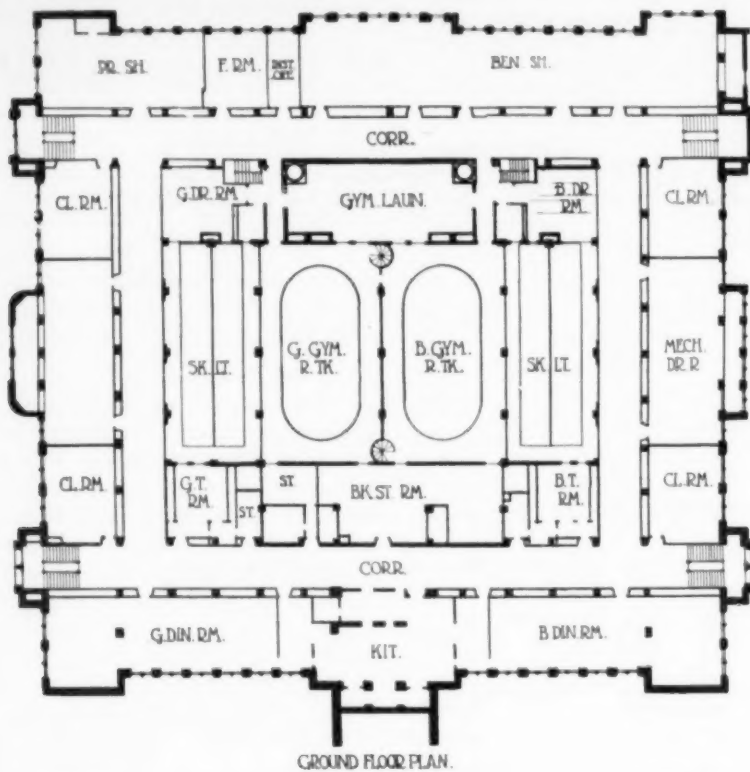
The aim of the projectors of this building was to afford ample opportunity for manual training and domestic science work, also to provide for social center development. The

BASEMENT FLOOR PLAN
BASEMENT PLAN OF THE WESTINGHOUSE HIGH SCHOOL, PITTSBURGH, PA.



WESTINGHOUSE HIGH SCHOOL, PITTSBURGH, PA.

Geo. S. Orth & Bro., Architects.



FLOOR PLANS OF THE WESTINGHOUSE HIGH SCHOOL, PITTSBURGH, PA. George S. Orth & Bro., Architects.

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McClure & Spahr, Architects.

tion to the general offices there is a medical inspector's office.

The vocational department includes a domestic science kitchen, drafting bench and sewing rooms, print, electric, machine and general shops. There is also a kitchen and two lunch rooms, storage rooms, teachers' rooms, etc.

The site on which the building is placed covers 4.2 acres. This was purchased at a cost of \$68,250. The building cost \$703,117 and the equipment \$89,915. The date of contract was December, 1921. It was ready for occupancy

April, 1923. McClure and Spahr were the architects.

The new Beechwood Grammar School at Pittsburgh contains 13 classrooms. It is provided with an auditorium located on the first floor and extending to the second floor.

Aside from the regular classrooms there are

It has a frontage of 325 feet on Sheraden Boulevard. The architecture is of the college gothic type. The building is constructed of unsmoothed Beaver County sandstone, with steel, hollow tile and cement interior.

The arrangement of the building shows that it has twelve classrooms and 33 other rooms, making 55 in all. In this enumeration of rooms are included the auditorium, stage, gymnasium, and library. Also science class, lecture, chemistry, physics, and biology, drawing, crafts, bookkeeping and typewriting rooms. In addi-



Messrs. McClure & Spahr, Architects.

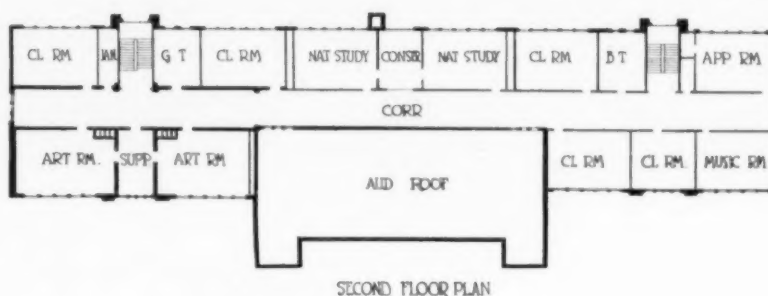


BEECHWOOD ELEMENTARY SCHOOL, PITTSBURGH, PA.

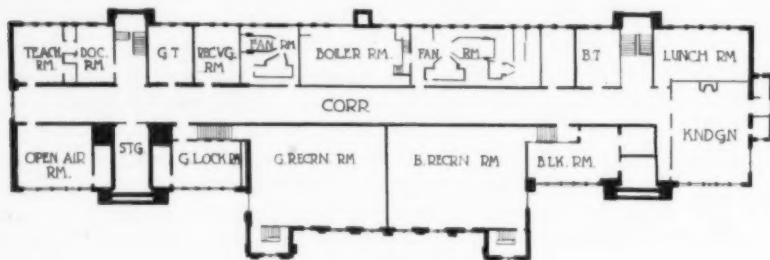
Press C. Dowler, Architect, Pittsburgh.

also two nature study and two art rooms. Arts, music, and library rooms are also provided. The separate recreation rooms for boys and girls are equipped with shower bath and lockers. The principal's office is provided with a reception room.

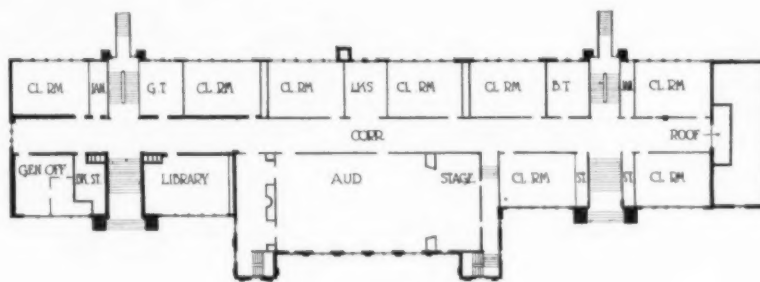
The building department estimates the cubage at 980,479 feet. The cost of the general work is \$300,796 or .2068 per cubic foot. The heating and ventilating cost, \$78,729; the plumbing, \$21,473; electrical, \$7,215; making a total of \$366,762. The grand total; namely, for grounds



SECOND FLOOR PLAN



GROUND FLOOR PLAN



FIRST FLOOR PLAN

FLOOR PLANS OF THE BEECHWOOD ELEMENTARY SCHOOL, PITTSBURGH, PA.

Press C. Dowler, Architect, Pittsburgh, Pa.

and building, is \$415,262. Press C. Dowler of Pittsburgh was the architect.

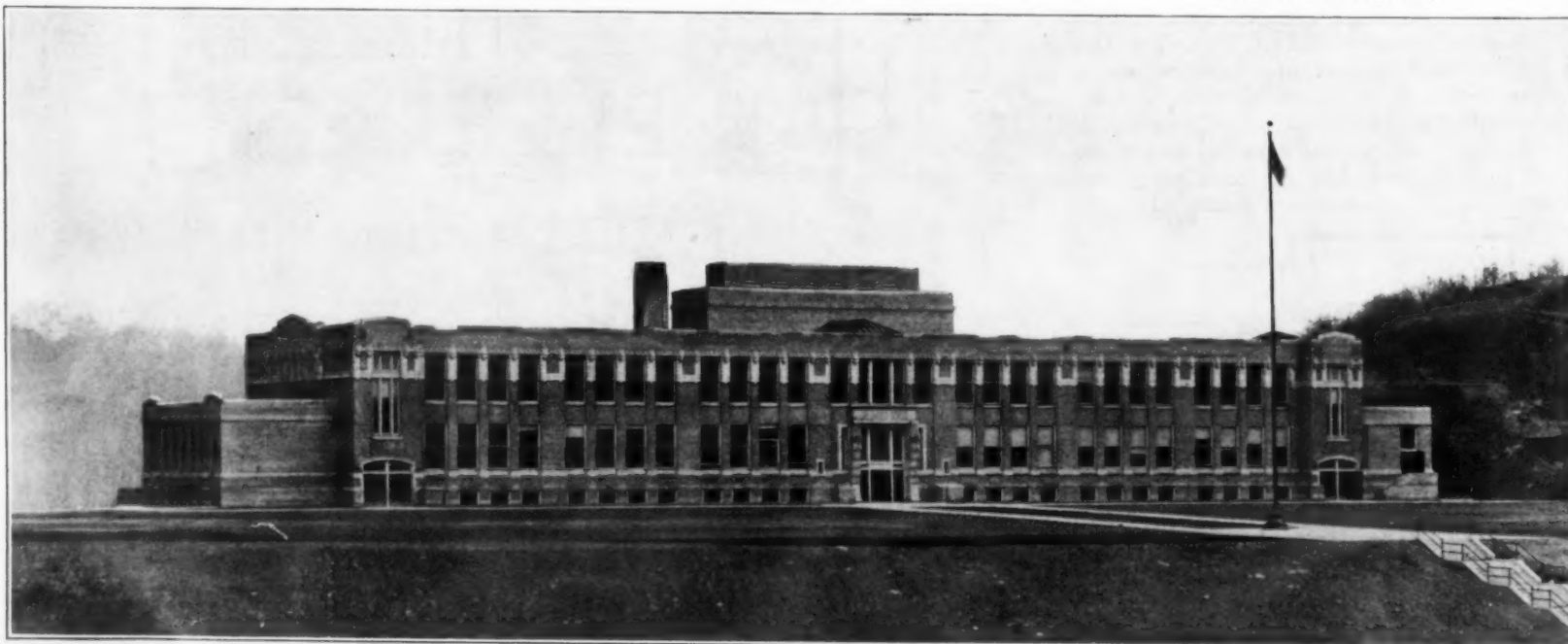
Greenfield Elementary School

The new Greenfield School, erected by the Pittsburgh board of education, contains all told

37 rooms. Of these twelve rooms are assigned to regular classroom work. The rest include an auditorium, stage, gymnasium, swimming pool, special study rooms, library, offices, store rooms, and a kindergarten suite.

The offices, aside from those occupied by the executives, provide for both a doctor's and a dentist's office. Among the special rooms are those devoted to drafting, bench work, sewing, lectures, nature study, music, art and domestic

(Concluded on Page 124)



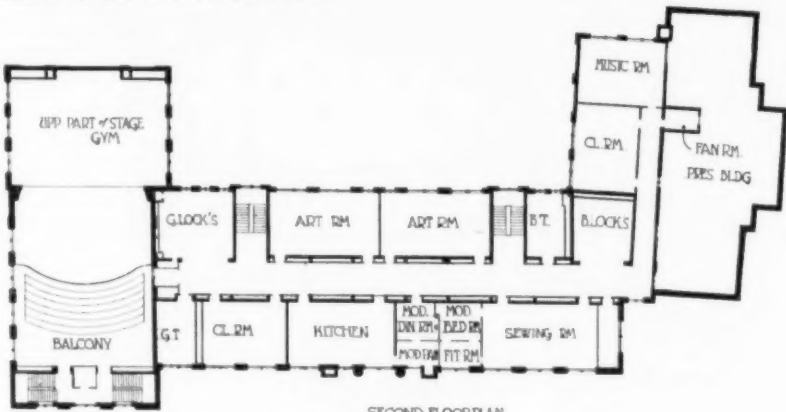
THE GREENFIELD ELEMENTARY SCHOOL, PITTSBURGH, PA.

Kiehnel & Elliott, Architects.



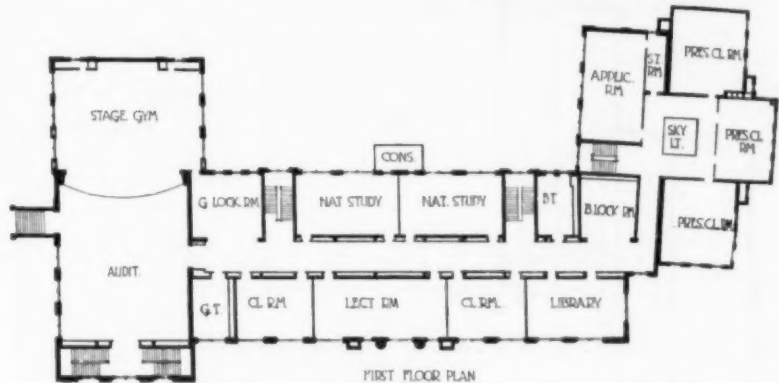
PERRY SCHOOL, PITTSBURGH, PA.

R. M. Trimble, Architect, Pittsburgh, Pa.



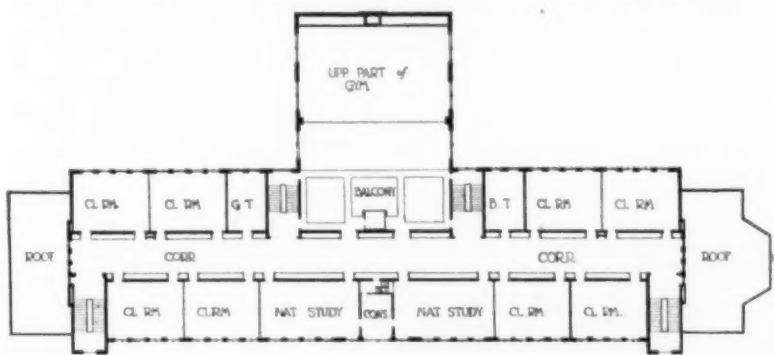
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PERRY ELEMENTARY SCHOOL, PITTSBURGH, PA. R. M. Trimble, Architect.



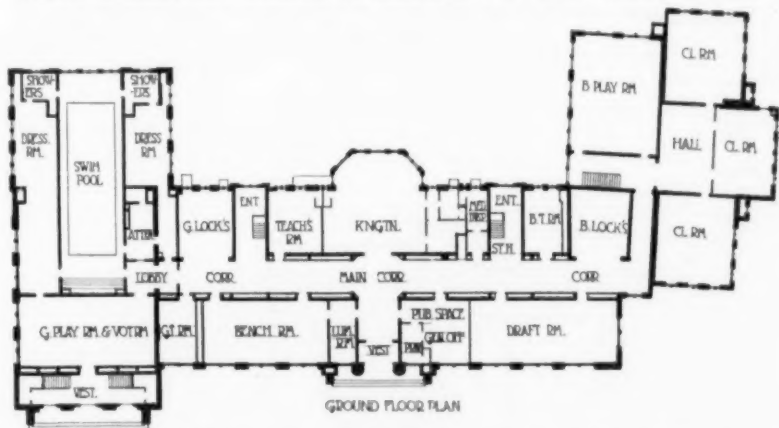
FIRST FLOOR PLAN

PERRY ELEMENTARY SCHOOL, PITTSBURGH, PA. R. M. Trimble, Architect.



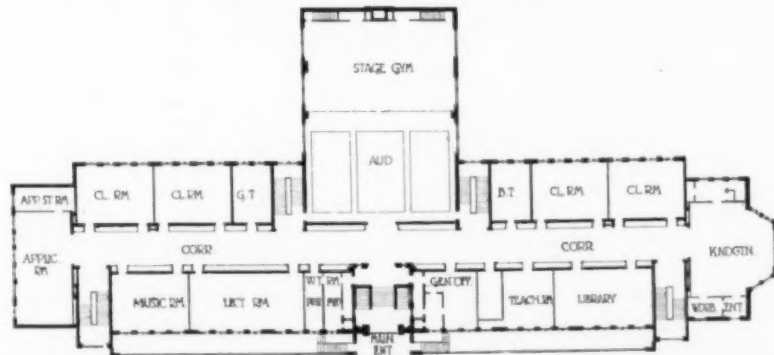
SECOND FLOOR PLAN

GREENFIELD ELEMENTARY SCHOOL, PITTSBURGH, PA. Kiehnel & Elliott, Architects.



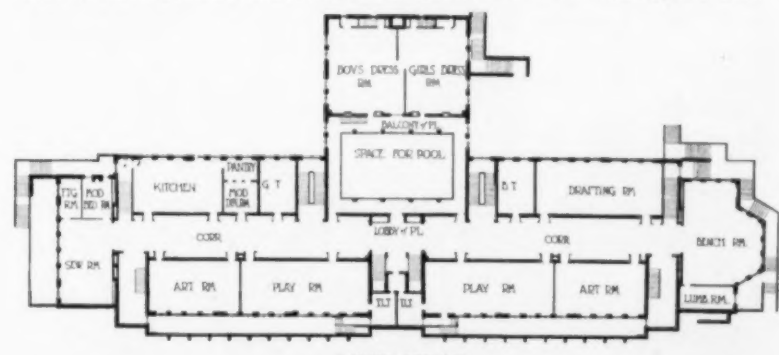
GROUND FLOOR PLAN

PERRY ELEMENTARY SCHOOL, PITTSBURGH, PA. R. M. Trimble, Architect.



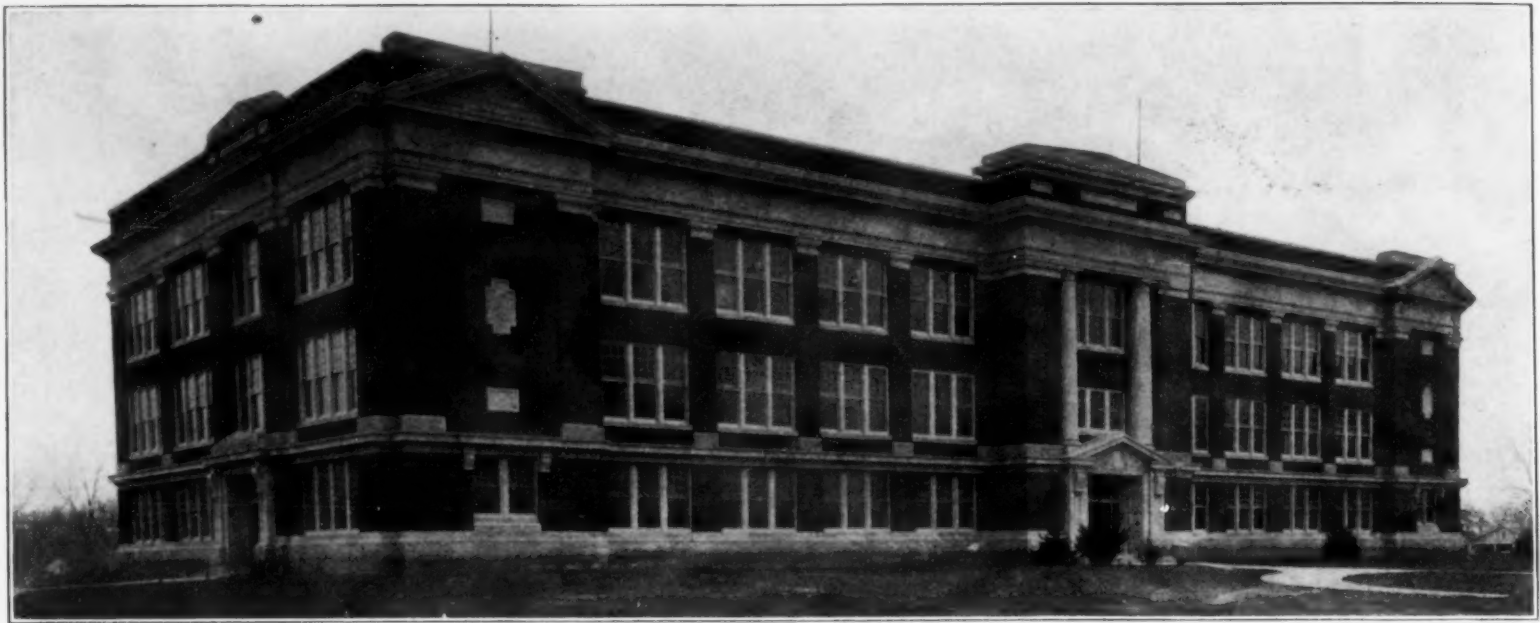
FIRST FLOOR PLAN

GREENFIELD ELEMENTARY SCHOOL, PITTSBURGH, PA. Kiehnel & Elliott, Architects.



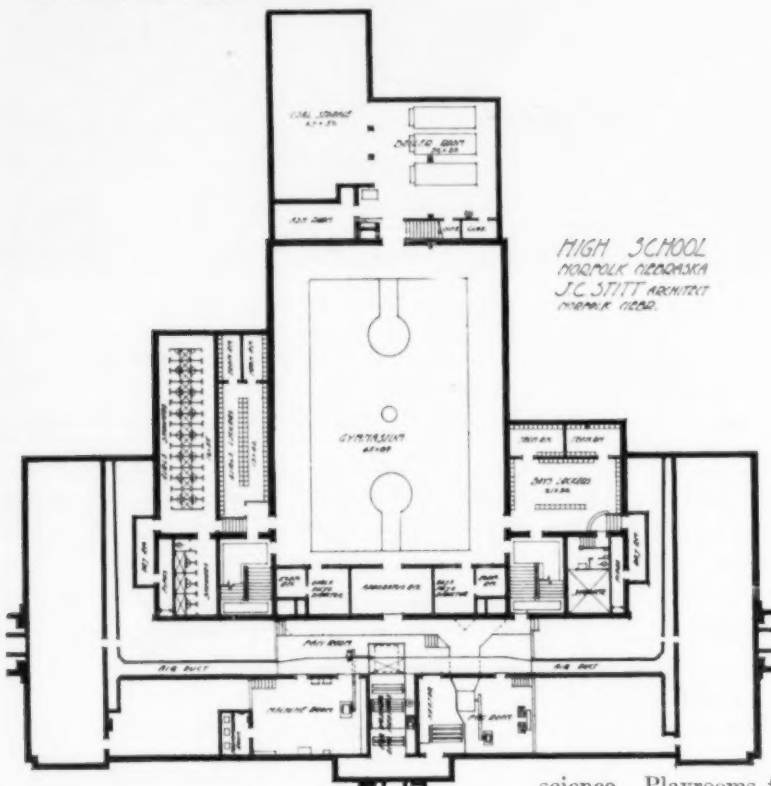
BASMENT FLOOR PLAN

GREENFIELD ELEMENTARY SCHOOL, PITTSBURGH, PA. Kiehnel & Elliott, Architects.



NORFOLK SENIOR HIGH SCHOOL,
NORFOLK, NEBRASKA.

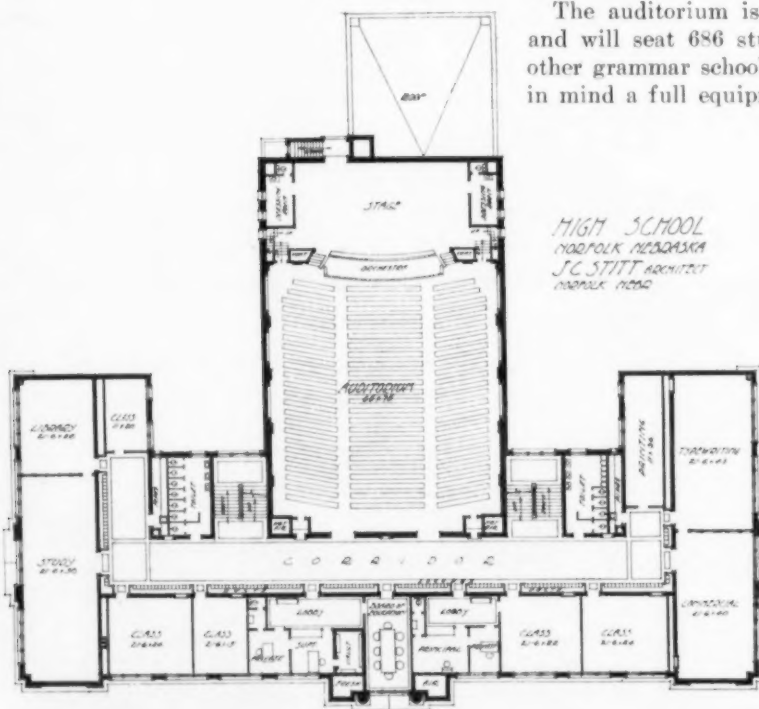
Jos. C. Stitt, Architect,
Norfolk, Nebraska.



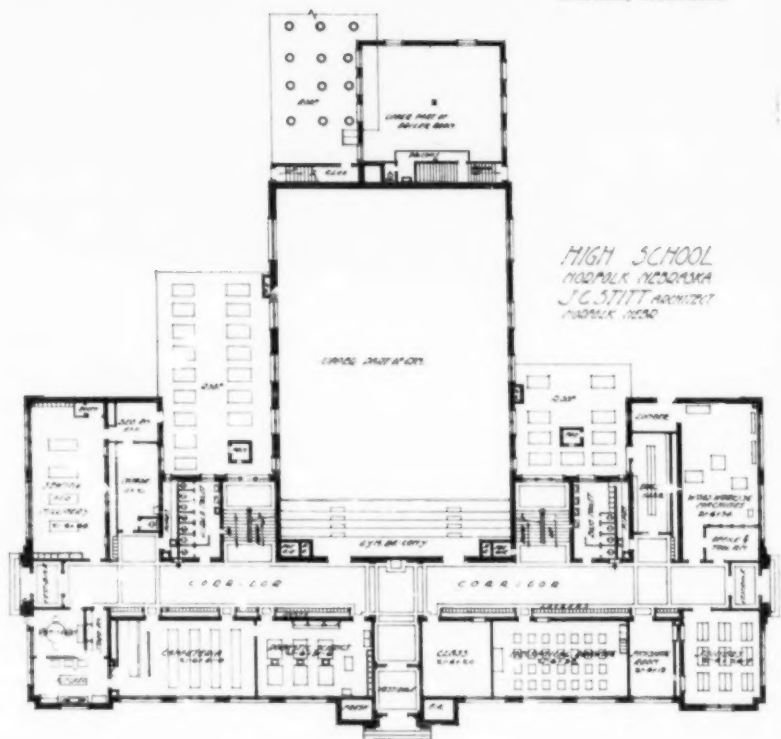
BASEMENT PLAN

science. Playrooms for both boys and girls are provided.

The auditorium is located on the first floor and will seat 686 students. Like some of the other grammar schools, the projectors have had in mind a full equipment for manual training,



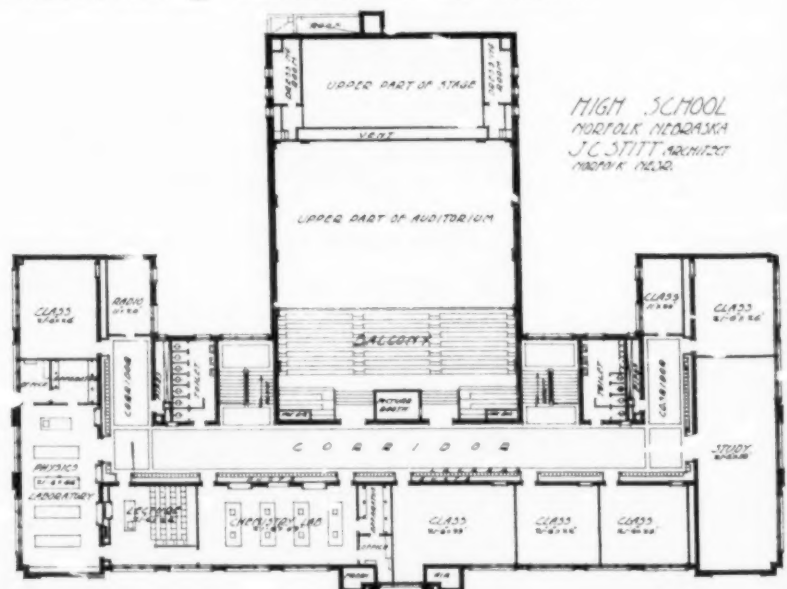
SECOND FLOOR PLAN



FIRST FLOOR PLAN

domestic science and social center work.

The lot contains 9.32 acres and was purchased at a cost of \$24,950. The building cost \$659,067 and the equipment \$39,260. Kiehnel and Elliott were the architects.



THIRD FLOOR PLAN

FLOOR PLANS OF THE NORFOLK SENIOR HIGH SCHOOL, NORFOLK, NEBRASKA.

HIGH SCHOOL, NORFOLK, NEBRASKA

The recently completed High School at Norfolk, Nebraska, is a silent expression of the thought that an impressive school building dignifies the cause of education and stimulates participation in the gifts of learning; and that, as the material advancement of a community is reflected in its fine retail and industrial buildings, so the cultural progress of that community is reflected in the grace and dignity of its school buildings.

Prominent educators who have visited this building have been favorably impressed with the arrangement and correlation of the various departments, and with the completeness of its details and appointments.

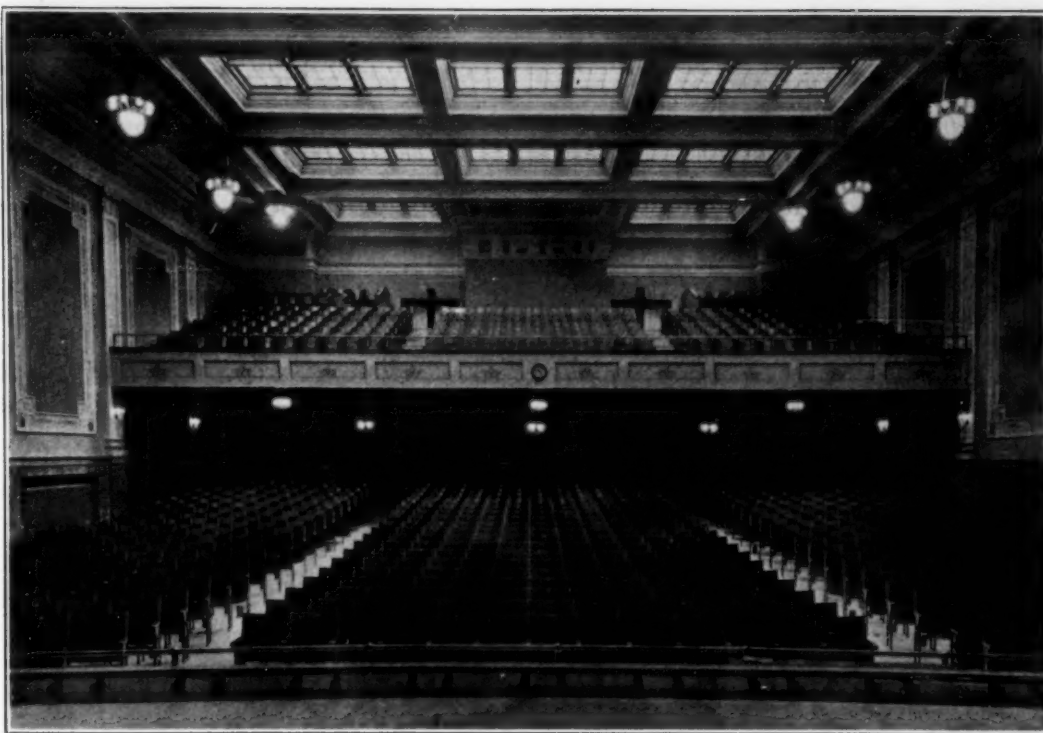
The building occupies a beautiful natural site facing a public park and the landscape treatment of the school site has been made to harmonize with the park. The main front has a southern exposure with a frontage of 208 feet and a maximum depth of 150 feet. In design the building follows the classical with straight lines predominating, neither over-ornate nor severely plain. A rich blend of brown face brick in combination with buff kasota limestone trim gives a very pleasing color effect.

All floor and ceiling construction is of reinforced concrete and all partitions are of solid brick or clay tile. The finished floors are entirely of cement or tile, except in the gymnasium and stage which are of maple, and in the manual training department which are of wood block, both laid over concrete. The greater portion of the cement floors are covered with battleship linoleum making them resilient, silent and comfortable. The interior wood trim is of oak and all walls and ceilings are painted.

Ample provision has been made for future growth and expansion at the rear of both end wings and in anticipation of such growth, the unit containing the auditorium, gymnasium and boiler room was designed of sufficient size to take care of double the present classroom capacity.

The auditorium has a seating capacity of 1,100 and is in reality a fully equipped theatre, suitable for concerts, lectures, and light theatricals. The room is lighted entirely from above through skylights and at night this same daylight effect is produced by concealed lights above the ceiling. The stage is supplied with scenery suitable for all school dramatics and a complete picture machine booth is located at the rear of the balcony.

All toilet and shower rooms are finished with tile floors, and marble stalls and wainscoting. Salt glazed brick were used for all inside window stools and also for the wainscots of the auditorium, gymnasium and kitchen.



AUDITORIUM OF THE NORFOLK, NEBRASKA, HIGH SCHOOL.

The gymnasium located immediately below the auditorium is reached by both main stairways. This room is of standard size and is provided with a spectators' gallery and space for bleachers totaling about 800 seats.

The building is equipped with a complete inter-phone system and also with program clock and fire alarm systems. Fire hose reels and stand pipes are provided at two central points in the main corridor of each floor and also upon the stage. Electrical outlets are placed at convenient points for the operation of portable vacuum cleaners, and all sweepings, waste paper, etc., drop to the basement from each floor through fireproof dust chutes.

The building is heated with a down feed vacuum steam system with automatic temperature control. A combination or "split" system is employed using direct radiation in connection with the fans and vent coils. The ventilating system can be used as a direct exhaust system, recirculating, or with open window ventilation. Fresh air is taken from above the roof line, passing down the air shafts and through the air washer and heating coils to the main fans. Special ventilation is provided for toilet rooms, shower rooms and locker rooms; in the latter rooms, all air is exhausted through the lockers themselves thus eliminating the disagreeable odors from gymnasium clothing.

In the matter of heating and ventilation, the

auditorium and gymnasium are treated as a separate unit and can be heated and ventilated independent of the rest of the building.

The total cost of the building, exclusive of furniture and fixtures was \$460,000.

The building was designed by and erected under the supervision of James C. Stitt, Architect, Norfolk, Nebraska.

Paul D. Cook of Sioux City, Iowa, was the structural engineer and The Natkin Engineering Co., of Kansas City, Mo., were the heating and ventilating engineers.

The educational features of the building were under the direction of Mr. H. B. Simon, superintendent of schools.

VIRGINIA TRUSTEES MEET

The School Trustee Association of Virginia will hold its annual meeting November 25-26, at Richmond. The tentative program which has just been announced by the president of the association, is as follows:

Address, Pres. T. S. Wilson.

Address, Douglas Freeman.

Address, "All-Year School Term," V. T. Sawyer, former secretary board of education.

Address, Col. Leroy Hodges.

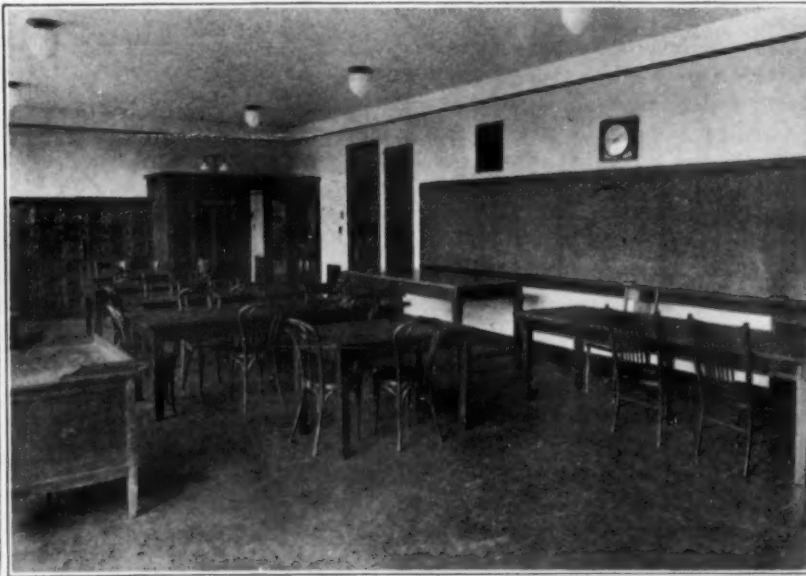
Address, Harris Hart, state superintendent of public instruction.

Address, J. R. Saunders.

The greater part of the sessions will be devoted to informal discussions and debates for which no set program has been arranged.



CORRIDOR IN THE NORFOLK HIGH SCHOOL.



TYPICAL WORKROOM IN THE NORFOLK HIGH SCHOOL.



THE AMERICAN School Board Journal

WM. GEO. BRUCE }
WM. C. BRUCE } Editors

EDITORIAL

BOARDS OF EDUCATION AND PUBLIC CONFIDENCE

There is no question that the most honorable, as well as the most capable, board of education must constantly take into account its own attitude toward the public. A dignified reserve or exclusiveness is bound, sooner or later, to excite public dissatisfaction and suspicion. This implies that the members of the board of education, both in their individual or collective capacity, must take the public into their confidence. A board may be ever so efficient in administering the affairs of a school system; but, if it does not meet the public openly and frankly it will expose itself to criticism.

The mayor of a Pacific Coast city breaks into public print with the following criticism: "People have told me that it is almost impossible to reach the ear of the school board, which is consistently holding aloof and sitting on a high and lofty pinnacle. They are holding secret sessions and even have bowed newspapermen out. There must be a change in the board of education. They cannot get away with their holier than thou attitude."

Whether this, or similar, criticisms are warranted we are not in a position to know. In truth, they may, in instances, be wholly unwarranted. The city mayor in question may be actuated by purely selfish political motives. The fact remains, however, that criticisms of this character may befall any board, whether deserved or undeserved.

The attitude which the school administrative body assumes toward the general public should be such as to render criticism of the kind untenable. During the past year important bond issues have been defeated and excellent members have been retired from school board membership, simply because there was a lack of that frankness which inspires public confidence.

There are instances where the school authorities are warranted to resort to executive or secret sessions, more specially where the morals of teachers and pupils are involved; but, on the whole, the general routine, as well as every major action or innovation, may well be placed before the public.

It happens that projects in hand are not ripe for publicity. If so, the newspaper men must be frankly told. Experience has taught that newspaper men, in cases of this kind, usually may be trusted. But, news must be released when it has become such, unless it be harmful to the good order and discipline of the school system.

The very nature of the business of the school system, being conducted in the interest of the public, implies such publicity as will keep a taxpaying constituency informed. Attempts at exclusiveness or suppression of facts are bound

to be followed by public criticism, which, at times, are fanned by the press into a huge disturbance, and out of all proportion to the real cause.

THE HIGH SCHOOL FRATERNITY EVIL ONCE MORE

The secret organizations, which, at one time, fastened themselves upon the high schools of the country, and which have universally been declared a pest and a nuisance by educators, have, it is believed, been reduced to a minimum. In recent months, however, they have again asserted themselves in several sections of the country to the annoyance and concern of school authorities, and once more their effectual obliteration is under consideration.

The question is not a new one. School authorities in many cities have been obliged, at some period, to grapple with it. Boards of education rules forbidding secret student organizations were widely adopted, and where these required reenforcement state laws were enacted.

Anti-fraternity laws were passed in 1907 in Indiana, Kansas and Minnesota; in 1908, by Ohio; in 1909, by California, Iowa, Nebraska, Oregon, Vermont and Washington. Some of the state laws, as for instance those of California and Indiana, specifically state that school boards are required to enforce the provisions of the act. Laws in other states empower the school boards to exercise their judgment as to the enforcement of rules against the fraternity evil.

The Indiana law says: "It shall be unlawful for the pupils in any of the elementary or high schools of this state to form secret societies, fraternities or other similar organizations, in such schools; and the board of school commissioners or board of trustees of any school, town, or city, and the trustee of any school township, and the superintendent of any school, are hereby required to enforce the provisions of this act by suspending, or, if necessary, expelling a pupil in any elementary or high school who refuses or neglects to obey such rules or regulations or any of them."

The California law reads: "It shall be unlawful for any pupil, enrolled as such in any elementary or secondary school of this state, to join or become a member of any secret fraternity, sorority or club, wholly or partly formed from the membership of pupils attending such public schools, or to take part in the organization or formation of any such fraternity, sorority or secret club."

"Boards of school trustees, and boards of education shall have full power and authority to enforce the provisions of this act and to make and enforce all rules and regulations needful for the government and discipline of the schools under their charge. They are hereby required to enforce the provisions of this act by suspending, or, if necessary, expelling a pupil in any elementary or secondary school who refuses or neglects to obey any or all such rules and regulations."

The cases which have been carried into the courts have, until recently, been uniformly decided against the fraternities and in support of the authority of school boards to suppress them. A recent decision, however, rendered by the supreme court of Missouri enjoins the board of education of Saint Louis from excluding pupils who have disobeyed the rule. The decision is based upon the fact that no act exists in the Missouri statutes rendering fraternities unlawful and that no evidence had been introduced, in the case named, to support the conclusion that membership in the fraternities had proved detrimental to the students.

The general status of the situation is, however, not materially changed by the Missouri decision. It does not affect the conclusions reached by the courts in other states. It may mean, however, that in future legal contests, and in the absence of specific state laws forbidding fraternities, the school authorities must definitely demonstrate the harmful influences exerted by such fraternities in order to uphold rules against them.

SCHOOL BOOK SCANDALS, OLD AND NEW

If one were to scan the country in search of what, in former days, was known as a school book scandal he would not find it. At least he would find little cause for complaint as to the manner in which school textbooks are chosen and the price paid for them.

As an editor of a Kentucky paper recently headed one of his leaders, "The Book Scandal," in which he discussed school book prices in the light of present-day conditions. He probably realized that there was a time when the headline promised a discussion on some irregularities. But, now he employed the headline in order to prove its irrelevancy.

The editor pointed out that, while the price of school books was reasonable it was burdensome upon some families whose income was small and crop of children large. "The cost of all the books in the fifth grade in the county schools," he says, "is about \$4.50. This, of course, is a bit hard for many good parents who have five or six; but, the advantages far exceed the outlay. A good many who complain most bitterly spend far more on practically useless things every few months and much complaint comes from the fellow who would not send his child to school at all if the state did not compel him. Much as it is to be regretted, there are still parents who would keep children under their teens at work to support the family; as, there are still men who at fifty, or even under, retire and let several daughters support him by standing behind counters."

In discussing textbook changes the editor says: "In a country where everybody wants, if he does not buy, the latest model automobile or the latest improved machine for any purpose, certainly it is not expected that the children should be deprived of the latest and best equipment for their work in the schoolroom, and it is not unlikely that many, who have unthinkingly criticized the change, have overlooked the fact that changes are only made every five years and an examination of the new books in comparison with the old will show the advantages of the new to any well educated person."

While textbooks may not change with the frequency of automobile models, it, nevertheless, follows that in a country, as progressive as our own, school books, too, are subject to revisions, changes and improvement. The advance constantly made in educational methods also finds expression in up-to-date authorship. The publisher strives to produce a more serviceable textbook than that of his competitor. An old school book may become as obsolete as an old flying machine model.

When any one now cries "school book scandal," it is not unlikely that he is spending more money in one month for gasoline in order to propel a pleasure car than he ever spent in all his life for school books. Fortunately, in most states, a common sense view has prevailed in the matter of textbook changes.

Educators as well as school administrators have recognized the fact that the tools and accessories employed in a school system ought to be as modern as are the methods of instruc-

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tion which are being fostered. Old tools and new methods are no more consistent than new tools and old methods. A school book must respond to the needs of a modern curriculum.

But, to return to the term "school book scandals." The press of the country has, in recent years, been remarkably free from the accounts of school book fights in which scandal was charged. The methods of selecting school books have been modified from time to time until expert judgment rather than political favoritism determines their choice. This is, of course, as it should be.

The complaints which have arisen in recent years have been directed more largely against the cost of school books than against the manner of their selection. And yet there have been no instances, where it has been demonstrated, that the present cost is not justified.

THE BOARD OF EDUCATION TROUBLE-MAKER

If school administration service has its compensations, it surely has its penalties as well. Nor are these penalties all in the nature of the reactions of an outside constituency; but penalties which come entirely from within.

The board of education that includes in its membership those who will not accept proper conceptions as to scope and function, and fail to recognize the relations between the several factors that must govern a school system, is, indeed, burdened with affliction. Members of the type indicated look for trouble and generally find it even if they have to create it themselves.

While distorted conceptions may lead to misunderstandings, temperamental peculiarities often lead to actual mischief. But, let a member plunge into a cloud of misconceptions as to relative prerogatives, attended with an irritable temper, and trouble will surely arise. Such a member can put the patience and self-control of his associates to a severe test. In his reasoning the superintendent is either a czar or a serf, a wizard or a fool, a gentleman or a roughneck. Besides that, no other member is quite as honest as is he himself.

Characterizations of this kind may seem somewhat exaggerated, or it may be held that the type is too exceptional to deserve mention; but, the type, nevertheless, exists and there are those who will find the characterization reasonably truthful. It is sometimes found that a new member, owing to a lack of experience, may lend himself to irregular tactics and eventually settle down to recognized procedure; but, the chronic disturber is, nevertheless, known to many.

Sometimes the active member can sway the passive associates into extreme conceptions of

administrative duty. A woman member recently gave us her dictum on school administration in a very few words. She wrote: "I am one of seven members. We have a superintendent who follows the dictations of our school board. He does what he is told, or gets his passport when election comes round again."

While in this instance a whole board proceeds under false conceptions as to a division of the duties and responsibilities of board and superintendent, there are boards where a minority or a single member may stand out against accepted and established relations.

Temperamental peculiarities must be found in every body of men or women, whether this be a board of education or a board of any other kind. They may break out at inopportune times and may result in embarrassments; but, the real trouble maker after all is he who seeks to enforce notions of his own which are contrary to the recognized principles in school administrative labors.

THE ELECTION OF BOARDS OF EDUCATION ON PARTISAN LINES

The evolution in the selection of members for school board service, from the appointive to the elective system has been a gradual one; but, the mode and manner of carrying out the latter system has not, in all states, reached a satisfactory interpretation.

One of the evils which still attaches to the elective system, as exemplified in certain states, is the partisan character of the elections. In many cities candidates for the school board are still nominated under the label of Republicans or Democrats.

True, in many instances, a spirit of partisan pride prompts the choosing of the most desirable men and women for school board honors; but, partisan zeal is, nevertheless, also apt to overlook the relative merits of the candidates. The desire to win an election is frequently stronger than the desire to serve the community.

In several Missouri cities, just now, an unrest is manifested regarding the law under which the school board candidates are chosen. The partisan label is employed and the elections are a part of the regular municipal contests. Party rivalry has led to unsatisfactory results.

The students of school administration have long determined that the employment of the party label in the choosing of members for the board of education has its drawbacks. The non-partisan method, on the other hand, has, thus far, demonstrated its practicability in that it has obviated many of the evils which have attached themselves to the bi-partisan practice.

It is also deemed

a mistake to merge school board elections with other municipal elections when the partisan spirit is likely to exert its influence. The creation of a board of education, in any community, is of sufficient importance to warrant a separate election day when the public mind may be free from the heat and turmoil that usually go with municipal contests.

THE COMMUNITY SPIRIT AND SCHOOL BUILDINGS

The pride of a town is usually expressed in the physical evidence of growth and prosperity. The local chamber of commerce points to the commercial and industrial achievements and seeks to stimulate a spirit of progress in civic, economic, and social effort.

The modern schoolhouse is growing more and more as a factor in exciting home pride and patriotism. "When our new school is finished we expect to build up a new community spirit," said A. H. Miller, secretary of the Hopkins, Minn., board of education recently. "First of all, parents will become more interested in the welfare of the school and the school children now that we have this concrete example of our progress. Then through using the school as a community center we will work for an increase in friendliness, and general interest in the good of the whole town."

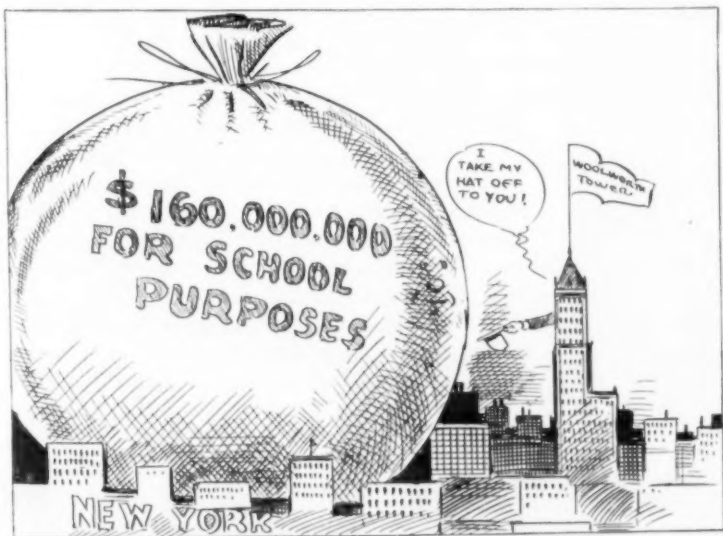
Where a new school building is stately in architectural design, and modern as to appointment, the imagination is fired into new stages of home pride. The stranger is not only apprised of the material advancement made; but also of the achievements in the field of education.

This phase in the value of modern school structures cannot be ignored. It not only serves the children who are to be reared into useful citizenship; but it also serves an adult constituency that is to be stimulated in the direction of higher aspirations in community life.

The chamber of commerce may, in its desire to impress an outside world with the advantage of the town, point to splendid bank buildings, to spacious manufacturing structures, and fine homes. But, it can do no better in an attempt to attract population and capital than to point to the educational facilities offered. Good school buildings are an index of progress that may appeal to the visitor with greater force than the business blocks on the main street.

On the other hand, the spirit of self-improvement as far as this may apply to the community as a whole is well stimulated in the schoolhouse that affords an assembly hall for gatherings of a popular nature. It affords the public an opportunity to get acquainted with itself and to learn of its hopes, its ambitions, and its aspirations.

—Biloxi, Miss. Three elementary buildings built during the summer were occupied on September 15th. Two of the buildings are of the two-story type, with eight classrooms, auditorium, offices and store rooms. The other one is a one-story building of the Spanish type. With the completion of the new buildings the city possesses an elementary school plant of five large buildings.



Some School Appropriation!



Shall He Be Thus Dignified?

Means by Which Teachers' Marks May be Made More Reliable

Kenneth W. Warden, Principal, Lenox School, Memphis, Tenn.

In a previous article, "Turning the Light on Teachers' Marks," I attempted to show how a superintendent, even in a small town, could cause his teachers to realize that their marks are not always accurate. The article dealt with three essential elements of an examination—the selection of the questions or problems, estimating the relative value of each, and the placing of the final mark on the pupil's paper. The teacher's marks, or the assigned values, were compared with the results obtained in a classroom examination. In this article I shall attempt to offer some suggestions as to how teachers' marks may be made more reliable.

If a superintendent or principal wishes to improve his grading system, by having more uniformity in marking papers, he must first convince his teachers in a professional, yet practical, way that their individual marks are not necessarily accurate. To do this, whatever plan is decided upon should be so complete within itself that the results obtained should carry conviction without argument or wrestling with technical terms. The plan I used, which was discussed in my previous article, worked admirably. It had its origin in my own school, and it never went beyond it; the teachers contributed collectively, yet each one worked separately; it showed conclusively that there was a wide variation in the assigned values and marks; but no one could be embarrassed by having her marks criticized. It was not a question of who was to blame for the variation; on the other hand each teacher was concerned as to how the variation could be overcome. It showed clearly the need of a more carefully planned grading system.

Several careful studies have been made of teachers' marks by graduate students and others, and in each of these studies a wide variation was found. These studies are available; but, I do not think they will help the average superintendent or principal very much in his struggle to develop a more uniform system of marking papers. It is true they contain sound information, and offer splendid suggestions; but, they should be brought in after the foundation for the study has been laid, and the foundation material should be gotten near at hand. These studies furnish momentary amusement for the average teacher. A principal will create a good hearty laugh when he tells his faculty that a teacher in a certain school system rated an arithmetic paper as being worth 56 per cent while another teacher in the same school system rated it as being worth 92 per cent. A variation of 36 per cent in marking the same paper is, apparently, ridiculous, therefore, it is amusing. Where the variation is ten per cent or less, it has no special interest for a large number of teachers. It would be breath wasted for a superintendent or principal to tell his teachers that their marks would vary twenty points in marking the same paper. Experience has taught me that teachers, as a rule, are pretty sure about the reliability of their marks, and any one who goes many points above or below their individual mark is wrong. So, in this particular phase of school work, I think improvement should start at home.

A great many teachers take pride in doing things different from any one else; I think a teacher's individuality should not be smothered out by a set of drastic regulations which do not

function properly in actual operation. Too much freedom, however, often leads to blind experimentation, and we have had enough of that already. Every school system, and each individual school, should have certain definite regulations in regard to the type of examination to be given, and the things which should determine the final mark placed on the pupil's paper. Should we add the daily grade and the examination grade and divide by two, or should we multiply the daily grade by two and add the examination grade and divide by three? Which is the better way? How many questions should be given in the different subjects on examination, and how much time should be allotted to each? I find this a pretty safe rule; a teacher should be able to complete her examination in one third the time she expects her pupils to complete it. Should we dock a paper for misspelled words, for grammatical errors, for failing to observe the rules of capitalization, and for lack of neatness? Should we grade an arithmetic paper on the basis of the number of problems solved correctly or should we credit a pupil for trying to solve a problem? Should we divide one hundred per cent by the number of problems given and assign this value to each regardless of its degree of difficulty? Should we consider conduct, times tardy, days absent, etc., before the final grade is recorded? These and many other similar questions should be discussed in orderly faculty meetings, and all teachers asked to conform to certain regulations governing them. It might not be wholly desirable for all the teachers in any one school to dispose of them in exactly the same way; but, where the exceptional case arises, it should be carefully noted.

Often pupils in departmental work are asked to observe different regulations and requirements, governing the examination and promotion, in each subject they are taking. One teacher may instruct her pupils to fold their papers the long way and to sign their name from the folded edge toward the right; another may instruct her pupils to fold their papers the same as the first; but, she insists that they sign their names from the open edge toward the right; while still another wants her papers left flat with the pupil's name at the top of the



ANOTHER KIND OF SCHOOL.

The Parsee children of India are prevented by the strict rule of caste from attending any school but one exclusively for them. Their teacher instructs them in the tenets of the Zorastrian faith as well as the rudiments of common schooling.

page. Why all this confusion? What is right in one room is wrong in another. It is no wonder that the public, in the past, accused teachers of being cranky. We dispute among ourselves over trivial matters and often lose sight of the big things which should receive our undivided attention.

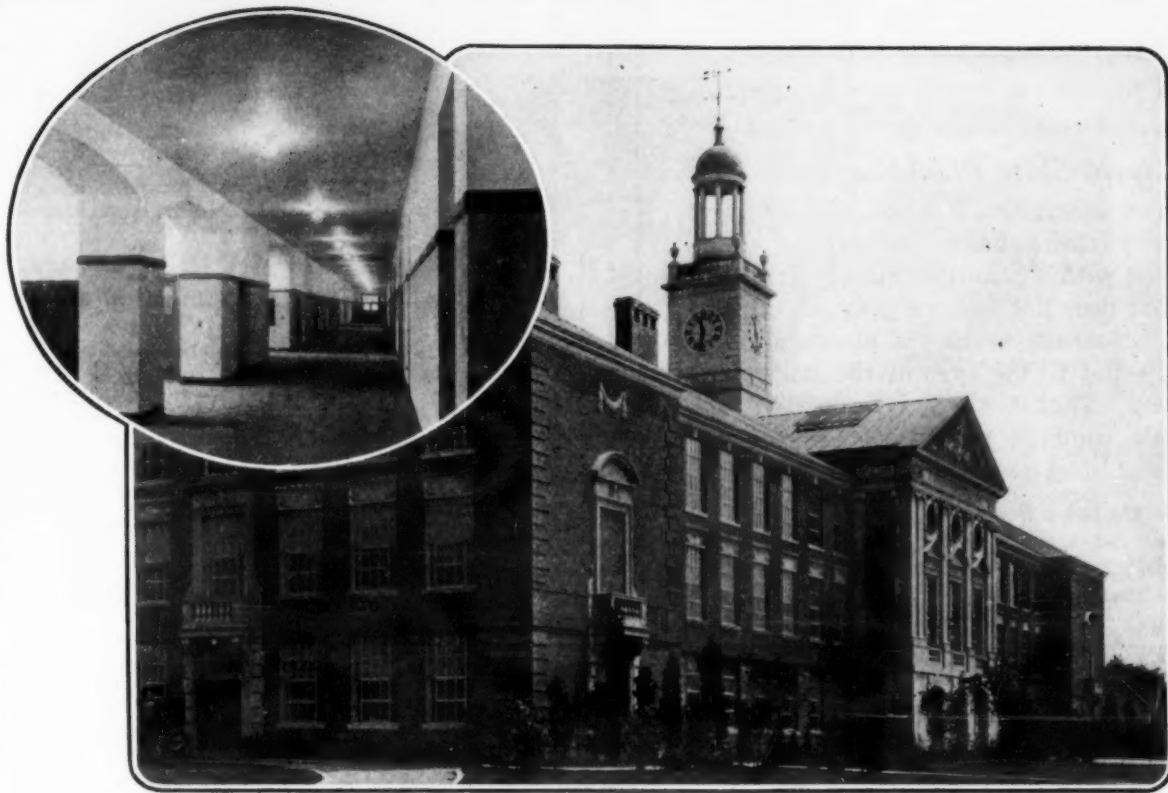
I have known teachers to revolt against the examination, and even go so far as to tell their pupils that it was a farce and a waste of time. However, the best teachers realize that the examination is necessarily a part of school work. I have heard teachers say they did not need to give their pupils an examination to find out who was going to pass; but, I have seriously questioned that statement each time I have heard it made. It assumes that there are no doubtful children in the group, and such an assumption is not often correct. The doubtful children are either held back or pushed forward at the pleasure of the teacher. The examination has revealed some wonderful surprises for me. I see no harm in the examination if the elements that enter into it are properly evaluated and all the machinery runs smoothly and uniformly. One reason the examination has not been looked upon favorably by many teachers as a fair basis for measuring results is that they have not taken it seriously themselves. The examination is not at fault, it is the way it has been used. More time and thought should be spent in selecting the examination questions. In general, each question should be examined as follows: (a) Does the question call for worth-while information? (b) Does it provoke thought or does it call for disorganized, memorized facts? (c) What is its relative value? (d) Is it within the proportional time limit? (e) Has the class been prepared for it? The last question may seem a little commonplace; but, just last year I was observing a teacher who included a cube root problem in an arithmetic test, and the children informed her that she allowed them to "skip" cube root.

Teachers who hold the same position in the grades from year to year, and especially the departmental teachers, have a splendid opportunity to develop a series of examination questions which would be far more reliable than questions selected at random. Apply the above test to each question; use the list for an examination, and study the results very carefully. Problems or questions that all, or practically all, the children solved or answered are evidently too easy; on the other hand, problems or questions that but few children solve or answer are unquestionably too difficult. Both types should be eliminated before the test is used again and new ones substituted. Questions that have a tendency to confuse the child ought to be eliminated also.

I would consider a question fairly good, if between 65 and 95 per cent of the class answered it correctly; of course, I am assuming that the class has average mentality. If one has a large class, or has access to other classes of the same grade, it doesn't take so very long, through the process of selection and elimination, to collect a series of questions which are very valuable. A question that less than 65 per cent of the class can answer is beyond a doubt too difficult to be used in testing the ability of the class. It is just as true that a question which more than 95 per cent of the class can answer correctly is too easy to be of much value. One can't test a boy's physical strength unless one gives the boy as much as or more than he can lift. The same is true, to a great extent, in measuring mental strength.

(Concluded on Page 66)

FLOORING



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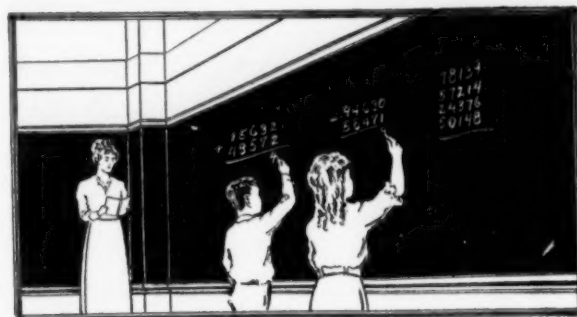
Worth Building

Easton, Pa.

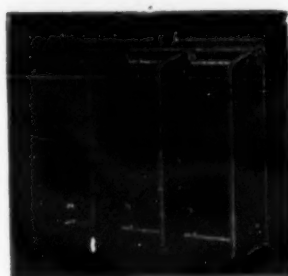
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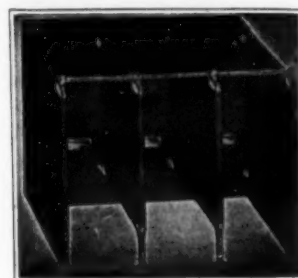
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(Concluded from Page 64)

Since the world war there has been a great deal said and written in regard to standard tests, and they have been used extensively in school surveys, as well as in school work in general. I have found that these tests are very valuable helps in classifying children. However, teachers, as a rule, have an antagonistic attitude toward the standard test. They seem to think it is used merely as a check on them. This is a wrong idea, of course, but time and education alone can change it. The standard test will find a permanent place in our schools; and, when it is better understood, the teachers will realize that it is of vital importance that they compare results with standard norms. I have given tests in arithmetic, using questions which had been revised several times, and followed each with the Woody Tests in Arithmetic and compared results. Each time I found a high correlation, and especially was this true in the upper grammar grades. I used the Woody Tests because they go from the simple problem to the very complex type. These tests also reveal the child's strong and weak points in arithmetic. By careful checking I found that the pupils who made a mistake dividing decimals, multiplying, or dividing mixed numbers in the written test blundered when they came to similar operations in the Woody Tests.

Very few teachers examine the test papers with a view to finding the pupil's weak points. We have been using the examination to find out what a pupil knows in a given subject; it also reveals what the pupil does not know in that subject; but, in our haste we have attempted to evaluate what the child did, or attempted to do, and that was the end of it. What a child does not know ought to be of more concern to the teacher than what the child does know. Do we promote children on the basis of what they

do know, or do we promote them on the basis of what they do not know? In other words, are we trying to find out through the examination what a child does know, or what he does not know? A teacher ought to know more about a child than what the examination reveals, otherwise, she is not in a position to pass judgment upon him. I have known teachers who would have the children hand in their examination papers without writing their name on them. After they were graded the teacher would have the children gather around her, and as the papers were claimed by the children, she would record the grade in her register. One teacher attempted to explain to me the advantages of such a system. I asked her which concerned her more as a teacher, system or method. Teachers need to know their pupils better. This is one of the disadvantages of departmental work in the grades; the teacher does not know her pupils sufficiently well. She may know their names and where each sits; but, she never approaches the inward life of the child which is often so easily developed and directed when once it finds congenial companionship in an efficient leader.

The real easy problem is not so objectionable as the extremely difficult one. Very little time is consumed in solving the easy problem; however, it does not measure the child's ability because it does not exercise the faculties ordinarily possessed by a child of his particular grade and age. Whereas, the difficult problem may come near the top of the list; the child gives it undue consideration, time is lost, he suddenly becomes nervous and is not capable of doing his best during the rest of the examination period. If questions or problems of unequal difficulty are to be given, the easiest should come first. The Woody Arithmetic

Tests allow the child to approach his maximum accomplishment gradually. On the other hand, the Curtis Tests in arithmetic are composed of a series of problems that are of equal difficulty. Therefore, the Curtis Tests start the pupil on a higher plane of mental activity and direct him along this plane with but little variation during the allotted time for the test. If a teacher has given questions or problems of unequal value, then certainly she should not assign the same value to each when she comes to evaluate the final mark.

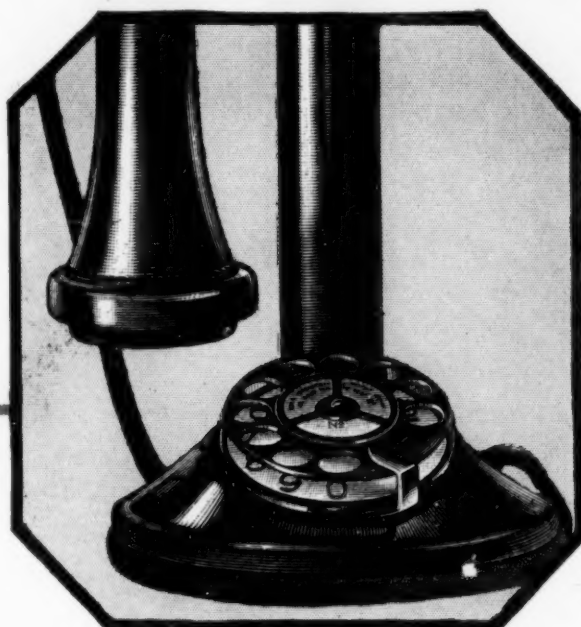
As teachers we shall never become very proficient in marking papers until we unselfishly and unprejudicially examine the available information on the subject of teachers' marks and weigh this information in the light of our own experience. So long as each of us remains a law unto our self, giving ten problems, selected at random, arbitrarily assigning ten per cent to each, we shall linger in the shadow of traditional custom and shut out the light of reason and justice.

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To work below the highest efficiency is thriftless if not shiftless. This is a time for saving by more and better education, more and better roads, more and better efforts for health and sanitation, more and better homes.

Even the reduction of taxes does not always result in saving, either to the individual, or to the community. It depends on resources of individuals and communities, on borrowing power, on the purposes for which the tax money is to be used, and upon the efficiency of the expenditures. By all means let us save. But where, how, and in what? That's the vital question.—H. E. Stone.



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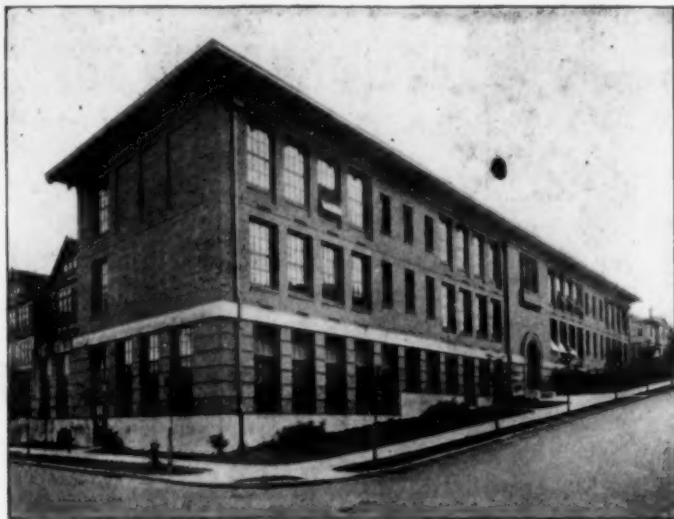
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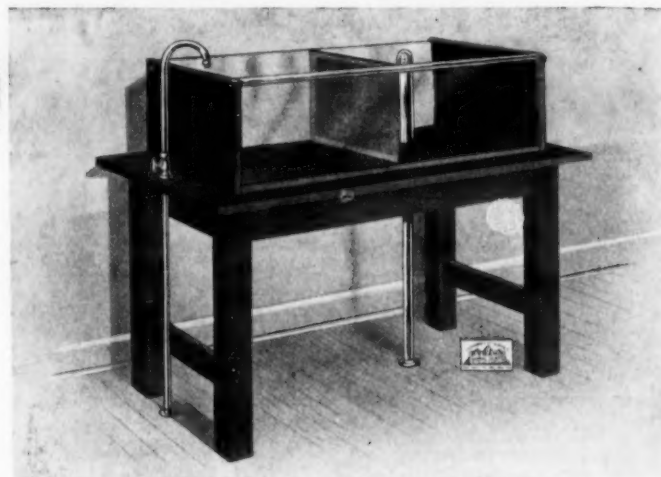
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School Lands and Funds

The education of the children of the state is an obligation which the state took over by the adoption of the California constitution and is exclusively a function which cannot be delegated to any other agency.—Piper v. Big Pine School Dist. of Inyo County, 226 P. 926, Calif.

School Districts

School districts are quasi municipal corporations, being involuntary political or civil divisions of the state created purely as auxiliaries of the state to aid in the general administration of the government.—Melin v. Community Consol. School Dist. No. 76, 144 N. E. 13, Ill.

A high school district with a distance of seven miles between east and west boundaries and six miles between north and south boundaries, with the schoolhouse site practically in the center of the district, and with seventeen miles of east and west roads and ten miles of north and south roads improved with concrete, gravel, or other durable surfacing and other well-kept dirt roads, is held sufficiently compact.—People v. Standley, 144 N. E. 355, Ill.

That people residing in a high school district trade at stores, deliver grain to elevators, do their banking business, and attend church, in cities or villages outside the district, does not establish that the district comprises more than one community for high school purposes.—People v. Standley, 144 N. E. 355, Ill.

School District Government

The duties of the state superintendent of public instruction in the performance of a contract with the state to supply books for six years, under the Texas laws (Vernon's annotated civil statutes Supp., 1918, art. 2909b), are purely ministerial, and he is without authority to contest its validity on account of irregularities in execution, in view of article 2909n.—Charles Scribner's Sons v. Marrs, 262 S. W. 722, Tex.

School District Property

Where one conveyed land to a school district "to have and to hold the same, with all the appurtenances thereof, to the second party, to their heirs and assigns forever, with covenants of general warranty," but after the description of the property provided that it should revert back to the grantor when no longer used for common school purposes, a determinable or qualified fee was created, and the school district had the right and power to execute an oil lease on the land as long as it was used for common school purposes.—Williams v. McKenzie, 262 S. W. 598, Ky.

A school district had no right to appropriate a part of a public park for the erection of a school building, even though the school might be beneficial to the public.—Melin v. Community Consol. School Dist. No. 76, 144 N. E. 13, Ky.

The Texas constitution, art. 7, § 8, and the civil statutes, Vernon's Supp., 1922, arts. 2904½, 2904¼d, 2904¼l, place responsibility and ultimate authority in the matter of purchasing textbooks and their distribution with the state board of education, and the attorney general cannot elect for state to accept or reject a contract for textbooks that is voidable, under the Texas constitution, art. 4, § 22, and the civil statutes, Vernon's Anno. Supp., 1918, art. 2909n.—Charles Scribner's Sons v. Marrs, 262 S. W. 722, Tex.

If the state textbook commission, in making a contract, did all the essential things, those that involved discretion, and proper bond was filed as required by the Texas revised statutes, arts. 4928, 4929, approval by the state superintendent of public instruction involved no discretion, and was obligatory.—Charles Scribner's Sons v. Marrs, 262 S. W. 722, Tex.

The Texas civil statutes (Supp. 1918, art. 2909b), authorizing contracts by state for purchase of school books from a certain firm for six years, is constitutional.—American Book Co. v. Marrs, 262 S. W. 730, Tex.

If terms of a building contractor's surety bond are susceptible of two constructions, that most favorable to beneficiary should be adopted, if consistent with purpose to be accomplished.—Gill v. Paysee, 226 P. 302, Nev.

An order by an obligee, required by a school building contractor's bond to notify surety in case of default and not to make the last pay-

ment without its consent, that last payment be paid to surety, on the contractor's default in payment for labor and materials, notwithstanding the contractor's assignment, is held binding practical construction of contract and bond as inuring to the benefit of laborers and material men. (Per Sanders, J.).—Gill v. Paysee, 226 P. 302, Nev.

A building contractor's bond, reciting that it was given under the Nevada statutes of 1921, c. 35, declaring laws governing the letting of contracts for public buildings applicable, is held given pursuant to the Nevada statutes of 1913, c. 264, requiring bond conditioned on the payment for labor and materials, though bond was conditioned to save obligee harmless only. (Per Coleman, J.).—Gill v. Paysee, 226 P. 302, Nev.

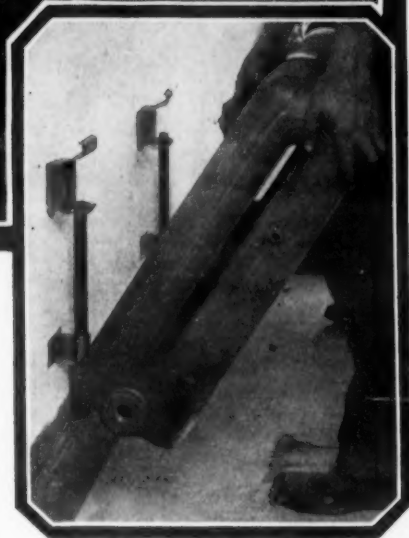
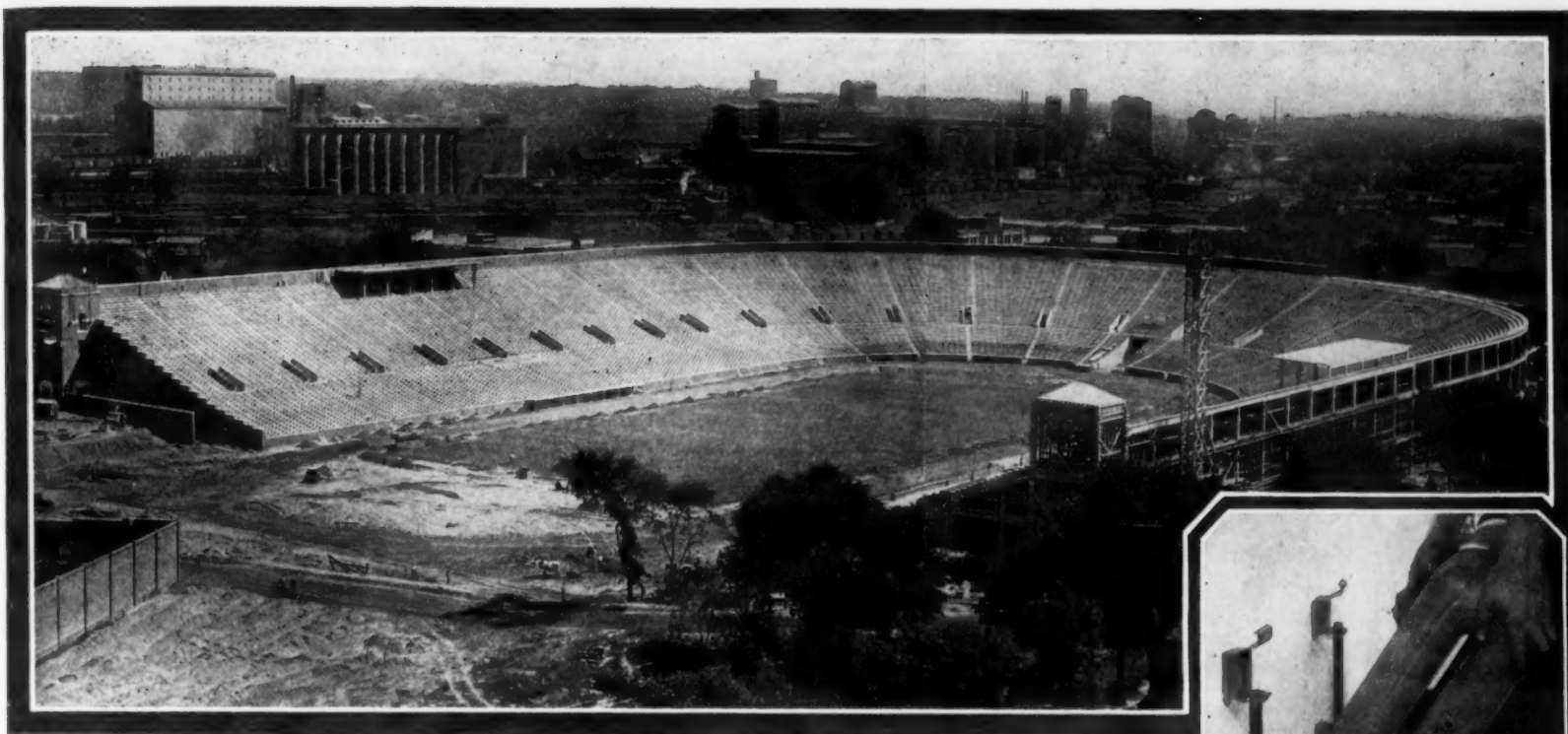
Under the West Virginia statutes (Barne's Code of 1923, c. 28a, § 12), a board of education cannot lawfully make contracts for the building and repairing of schoolhouses and for furnishing them at a time when such contracts would involve the expenditure of money in excess of funds legally at the disposal of the board, and such contracts and school orders issued thereunder are void and unenforceable.—Shonk Land Co. v. Joachim, 123 S. E. 444, W. Va.

A void contract for the building, repairing and furnishing of schoolhouses made when such contracts would involve the expenditure of money in excess of funds legally at the disposal of the board of education cannot be made lawful by the issuance of school orders in discharge thereof in subsequent fiscal years, although the board could then pay them out of the levies contemplated for that year.—Shonk Land Co. v. Joachim, 123 S. E. 444, W. Va.

A written contract for the purchase of schoolhouse furnishings and equipment made by a board of education at a time when the board had no funds legally at its disposal for such purpose, payment therefor to be made in the succeeding fiscal year, is void on its face under the West Virginia statutes (Barne's code of 1923, c. 28a, § 12), as creating a debt which involves payment by future tax levies.—Shonk Land Co. v. Joachim, 123 S. E. 444, W. Va.

The board of education did not breach its contract with the contractor on a school building by failure to enforce an architect's ruling that workmen of another contractor should be re-

(Continued on Page 70)



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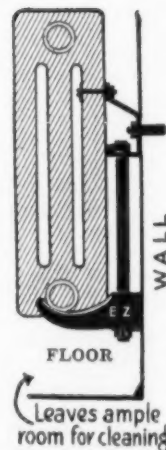
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(Concluded from Page 68)

moved from the building, the contracts of various contractors providing that they should employ competent workmen and that the architect should have the right to cause undesirable workmen to leave premises; the only reason for lack of harmony between employees being that some were union and some non-union men.—E. C. Gerhard Bldg. Co. v. City of Dallas, 298 F. 264, U. S. C. C. A. Tex.

Where the subcontractors on a school building terminated their contracts before abandonment of contracts by the principal contractor, the latter could not, some two weeks later, revive subcontracts without the consent of subcontractors by assigning them to the city, and failure of subcontractors to complete their contract did not release the principal contractor from liability.—E. C. Gerhard Bldg. Co. v. City of Dallas, 298 F. 264, U. S. C. C. A. Tex.

Teachers

The office of assistant principal of the high school in the city of Revere could not be abolished by a vote of five to two, where votes of two in favor of abolishment were not cast on the merits of the question in the interest of public welfare, but were cast as a means of displacing the incumbent because of his political views, in view of the Massachusetts General Laws, c. 71, §§ 39, 42.—Sweeney v. School Committee, of City of Revere, 144 N. E. 377, Mass.

Pupils

The enjoyment of privileges of attending public schools is an enforceable right vouchsafed to all who have a legal right to attend the public schools, which cannot be enjoyed as a matter of right by those who, from choice or compulsion, attend schools without the control, supervision, and regulation of the state educational departments.—Piper v. Big Pine School Dist. of Inyo County, 226 P. 926, Calif.

The petitioner, an Indian child whose parents as well as herself are citizens of the United States and of the state, and who never belonged to any tribe within the Dawes act of 1887 (U. S. complete statutes, § 3951), was entitled to attend as a pupil a school conducted by the governing body of the school district of which she is a resident and a citizen, in view of the California constitution, art. 9, §§ 1, 5, and the U. S. constitutional amendment 14, and could

not be excluded under the California political code, § 1662, subds. 2, 3, merely because she was an Indian and as such was eligible to attend a federal school for Indians situated in the same district; California statutes of 1921, p. 1673, § 1, subds. 3, 4 (known as compulsory educational law), not applying.—Piper v. Big Pine School Dist. of Inyo County, 226 P. 926, Calif.

CAUSES OF ABSENCE

An interesting study of causes of absence in one grade of fifteen schools in the city of Washington was made during the school year 1923-24 by a committee headed by Dr. Louise Taylor-Jones. The report shows that colds were the single largest cause of absence and that illnesses other than colds equalled all other causes of absence.

The study was made in fifteen third grades. The schools were located in all parts of the city and included some in outlying superior residential districts, a platoon school, an open air school, a school for colored children, and several schools in densely settled sections of the city. The absences were recorded for about 490 pupils during the period of an entire school year of 180 school days.

A total of 4,980½ days of absence were recorded. Colds cause 1,418½ days of absence or 27.7 per cent of all days of absence, and constituted 39.2 per cent of all illnesses. This was true in spite of the fact that coughs, sore throats, and bronchitis were considered among other types of illness. The lowest average loss of time due to colds was in the open air school where only 0.6 per cent of the time was lost. The period of the year showing the greatest prevalence of colds varied somewhat, but in all schools a sudden rise was noted after the first advent of cold weather and the beginning of the heating season. This occurred in November. Another high peak came in January.

The city of Washington during the year 1923-24 was singularly free from contagious diseases and in the fifteen classes only two cases of measles were reported. Similarly there was a small loss of time due to scarlet fever and similar contagious children's diseases. Toothache and impetigo were among the troublesome causes of loss of time which might very well be obviated. Ear ache caused a loss of 70 days

and tonsillitis and other throat troubles 230 days. There was a great deal of absence due to eye trouble, 67 days, and headache was responsible for 156½ days of absence.

Weather was considered a fourth cause of absence and was responsible for a loss of 234 days among the boys and 270½ days among the girls. Truancy caused a loss of 8 days among the boys and 9½ days among the girls. Religious holidays caused a loss of 76½ days by the boys and 68 days by girls.

The study revealed the fact that there is considerable absence for miscellaneous and frequently trifling causes. Such causes as "going to the dentist," shopping, "going for a hair cut," the movies, "going to the horse show," and similar causes made a total of 491½ days by boys and 434 days lost by girls.

Summarizing its conclusions the committee found that "seventy per cent of all absences are due to medical problems.

"Of these one-fourth are common colds, and respiratory disturbances caused nearly 40 per cent of all absences.

"Truancy is not a large problem at this age. "Boys and girls at 8 years of age seem to be absent about equally for all causes."

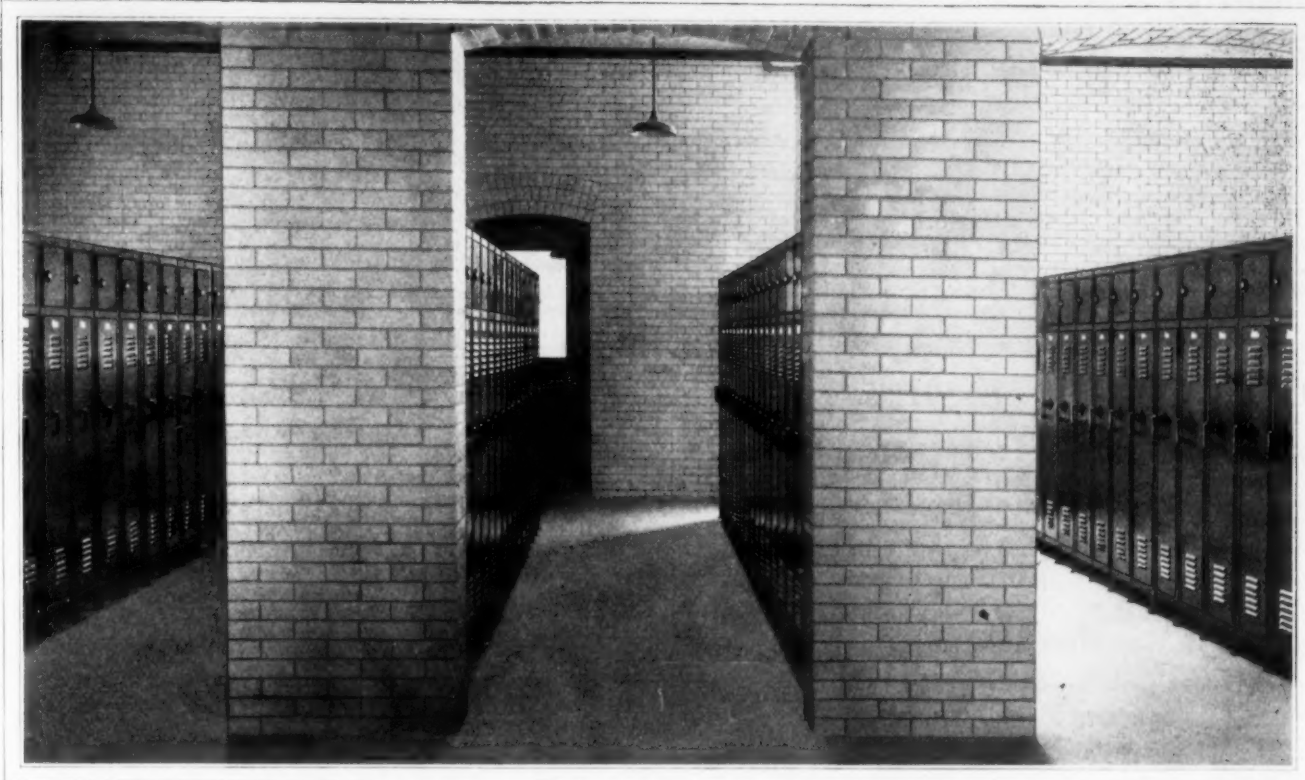
CHATS DURING RECESS

—Mrs. Ellen Lawton Wilson who as secretary of the De Pere, Wis., school board who receives \$100 a year has donated the amount for a shower bath in the high school building. Will an increased salary mean more shower baths?

—At Kansas City, Mo., the school board fired a high school printing instructor for kissing one of the girl pupils. The girl pleaded for the instructor and said that he had kissed her "in a dare" and "we would have thought that we had scored against any teacher if he had refused a dare." That girl certainly set up a good defense.

—News Item: "Recently the school board held a special meeting to give taxpayers a chance to discuss the coming year's budget, but nobody showed up. That is the usual story; but it is dollars to doughnuts there will be the usual amount of kicking after the board has gone ahead and done the best it could without the public's help."

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An Installation of Lyon Steel Lockers at Lawrence High School, Lawrence, Mass.

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The Services of the School Specialist in a School Building Program

The construction of schools, in accordance with a well planned Building Program, extending over a period of years, is now accepted as the most successful and economical way of providing efficient school structures to meet the immediate and future educational requirements of a community.

Formulating a successful Building Program, however, requires a most comprehensive analysis of the local conditions with reference to the present needs and future growth, financial ability and a complete knowledge of educational progress and the practical incorporation in the program.

These considerations involve economies in the selection and development of sites, planning and architectural construction details with exhaustive care and standardization of equipment and supplies. They also involve a distribution of the burden over a period of time, likely to exert a measure of equity to a tax paying constituency.

The Building Program presents problems of educational direction, legislation, finance, architecture, construction, equipment and maintenance and the successful program must be based on the practical solution of these problems.

The need, value and economy of securing the services of an expert in working out these problems is very evident. There is a growing demand on the part of school authorities for the professional services of the expert covering:

| | |
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| Heating and Ventilating | School Bond Issues |
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SCHOOL BUILDING NEWS

COST OF DAMAGE TO NEW YORK SCHOOL-HOUSES

—New York, N. Y. Vandals have for several years been doing damage to the city school buildings, amounting to more than \$200,000 a year. Supt. W. J. O'Shea has taken drastic action to place a curb on the wanton destruction of school property by directing district superintendents and principals to organize police patrols of pupils and teachers for duty outside of school hours. He says:

"The malicious and wanton destruction of school property through the breaking of windows, defacement of buildings and unlawful entries amounts to more than \$200,000.

"Principals, teachers and custodians should use every effort to stop this destruction, to insist upon replacement by parents, when possible, and as a last resort, to have offenders old enough to understand, dealt with according to law.

"The amount of damage may be reduced by encouraging pupils themselves to stop the destruction through the inauguration of a policing system by boy scouts or some other form of organization composed of pupils of the school, and conducted by them under the direction of a teacher. Such patrol work should be carried on both during and after school hours, if possible."

SCHOOL BUILDING NEWS.

—Falmouth, Mass. A new \$150,000 high school now under construction will be ready for occupancy the first of the year.

—Buffalo, N. Y. The board of education is completing its building program undertaken several years ago, through its own architectural, drafting and supervisory staff. Mr. Wm. B. Ittner, of St. Louis, has been engaged as consulting architect. The board recently terminated its arrangement with the Buffalo Associated

Architects for the school building work outlined in connection with the building program.

—The New York City board of education has for the first time approved at one step plans for an entire building, including the mechanical work. The action was taken regarding plans for the proposed School No. 72, in the Bronx, and received the approval of Dr. J. A. Ferguson, chairman of the committee on buildings and sites of the board.

Dr. Ferguson explained that the process employed will materially reduce the time required to complete new buildings. Plans were approved for the entire building, including the plumbing, heating, ventilation and electrical work. It is believed that contracts for the other work will be awarded shortly, instead of having to wait for an examination of the plans and report upon them.

—Bridgeport, Conn. With the opening of the new school year, the board of education has completed the elementary part of its building program adopted in 1922. The program which is to cover a three-year period, involves a total expenditure of \$2,700,000. The completion of two new elementary schools and three additions has resulted in considerable improvement in the elementary school situation.

The Warren Harding High School, which will be ready for occupancy in 1925, will place high school part-time pupils on a full-time basis for the first time in fifteen years. The building has entirely modern equipment and is provided with ample grounds for an athletic field and bleachers accommodating a large number of spectators.

At the present time there is an unexpended balance remaining of the bond issue of about \$500,000.

—Providence, R. I. Because of congestion in the grade schools, the board has reopened two unused buildings for the use of classes of backward children. Both buildings are wooden structures which had been abandoned for some time because of the erection of modern structures.

—The school board at Austin, Minn., has awarded the contract for a memorial gymnasium to be erected at a cost of \$26,898. In the will of the late O. W. Shaw, the sum of \$35,000 was left for the erection and equipment of a gymnasium. Two daughters of Mr. Shaw later

donated \$10,000, so that with the interest on the original gift, the amount available is now \$50,000.

—Michigan City, Ind. A total of \$240,000 worth of school bonds, bearing four and one-half per cent interest, were recently sold to a Chicago bank. The proceeds of the issue will be used in the erection of a new high school, the contract for which is to be awarded shortly.

—Omaha, Neb. The school board has asked the voters to approve a two and one-half million dollar bond issue at the November election to meet the present needs of the schools. The bonds will be used for the erection of five grade schools, additions to nine buildings, the erection of an auditorium and gymnasium for the Central high school, and the completion of the South High School.

—New Castle, Pa. The corner stone of the junior-senior high school was laid on September 12th, with appropriate ceremonies. A musical and speaking program was given. President P. W. Griffen placed the corner stone.

—Mishawaka, Ind. The corner stone of the high school was laid on September 11th. The building will be erected at a cost of \$750,000.

—Hamburg, Ia. The corner stone of a new high school was laid on September 9th.

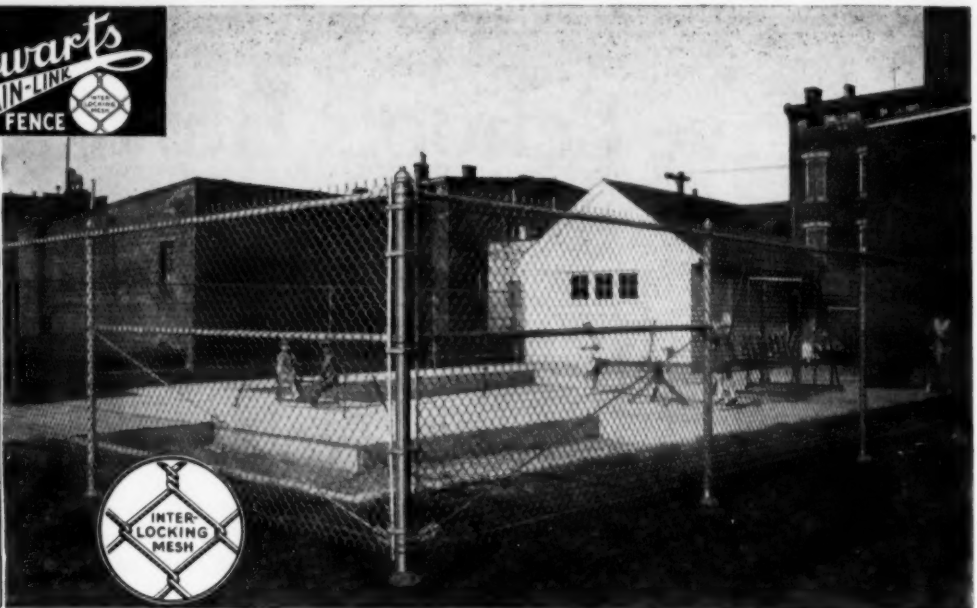
—The New Jersey State Board of Education has approved a recommendation of Commissioner John Enright, providing for an investigation of new school sites. The action is intended to forestall the erection of high schools in suburban municipalities where such facilities are available. It was shown that growing municipalities, through local pride, have proposed the erection of new schools, despite available facilities in adjacent towns. It was pointed out that, in some cases, municipalities have attempted to compel the approval of proposed high school courses previous to the erection of new buildings.

—An emergency building program providing for twelve building operations and costing \$7,000,000 has been presented to the Cleveland, Ohio, school board for approval. The major part of the program will be the erection of a high school of commerce to cost \$1,659,650.

—Nashua, N. H. The corner stone of the Mt. Pleasant school was laid on September 6th.



Courtesy—Birmingham News



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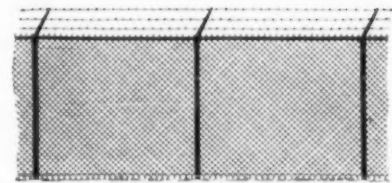
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—The corner stone of a new high school to cost \$95,000 was laid on September 13th at Millwood, Wash. The building will be ready for occupancy with the opening of the second semester.

—Buffalo, N. Y. The corner stone of Public School 71 was laid on September 10th. Supt. E. C. Hartwell, and Mrs. William F. Felton, president of the board, gave addresses. The building, which is of fireproof construction, is three stories high, and will accommodate 1,200 students. It will be completed ready for use in September, 1925.

—Cedar Rapids, Ia. The school board has received bids for the construction of the new Woodrow Wilson junior high school. The plans call for a two-story building to cost about \$300,000. Mr. Bert Rugh is the architect of the building.

—Hoboken, N. J. The school board has honored two deceased educators of the city in renaming the high school the Demarest High School, and the junior high school the Joseph F. Brandt school.

—Peoria, Ill. In the direction of formulating a building program looking into future needs, the school board has begun a study of the chapter "recommendations for a building program" in the survey made of the schools last year by the state university.

—The Ohio Department of Education has announced the distribution of state aid funds to financially weak school districts, the distribution being effected fully two months earlier than last year. It is found that conditions in certain districts are the worst in the history of the state, despite retrenchment measures effected in many districts. While teaching staffs have been reduced, there are many schools which may be compelled to close before the end of the term if emergency relief is not supplied.

It is found that several factors operate to make the situation serious this year. Last year the \$2,000,000 appropriation was swelled by \$780,000 derived from an old fifteen mill state levy, which was collected for use in 1922-1923. There are no extra funds available this year to be added to the appropriation.

In many districts teachers waited for their pay until the first of the year. Money so expended may be regarded as past obligations and

further decreases the funds available for this year. Added to this, there are a number of weak schools which are not able to qualify for state aid.

The state department has assigned a representative to each district to confer with the schools regarding their immediate needs and to effect plans for further retrenchment measures where these are indicated as necessary.

—Duluth, Minn. The taxpayers face an increase of 2.273 mills in the tax levy for public schools this year. The levy for this year will be 26.483 as compared with a levy of 24.21 mills last year. The increases are in the general and building funds.

—St. Louis, Mo. In rejecting proposed salary increases for teachers, the board has explained its action, pointing to a possible deficit of \$1,961,122, as between its estimated income and expenditures for the year 1924-1925.

The situation has been attributed to the unusual number of contracts falling due this year, particularly for the construction of two high schools and three colored schools. New buildings will aggregate an expenditure of \$2,382,000, which is \$1,212,000 in excess of the average amount for the past six years.

Included in the new structures on which contracts call for part or full payment this year are: Roosevelt High School, cost \$1,500,000; Beaumont High School, cost \$1,500,000; Elias Michael School, cost \$200,000; School for Handicapped Colored Children, cost \$250,000; and Lincoln school, cost \$250,000.

—Centralia, Wash. A new school was opened for the first time on September 8th. Two schools erected the past summer, have been placed in use, relieving badly congested conditions in other buildings.

Additional accommodations have been provided in the senior high school with the retention of four grades and the eighth grade divisions. The seventh grades have been removed to near-by buildings made available this year.

—Penn Grove, Calif. The citizens have approved a bond issue of \$33,000 calling for the erection and equipment of a new school building. A six-room school of modern design will be erected to replace an old building.

—The school board of Greensburg, Pa., has asked the voters to approve a bond issue of

\$600,000 at the November election for the purpose of completing and equipping the high school now under construction. It has been found that the building is not adequate for the needs of the high school and that funds are not available for the completion of the structure.

—San Francisco, Calif. Mayor James Rolph, Jr., has recommended that two new schools be named after men identified with the educational development of the city. The names suggested are Raphael Weill and Edward Taylor.

—Indianapolis, Ind. The board of school commissioners has adopted a tax rate of \$1.04 for 1925, plus an amount for teachers' pensions to be determined later.

An unmodified budget, calling for a total expenditure of \$9,602,407 was also adopted. It contains provisions for the erection of the Shortridge high school, the west high school, a colored high school, and several grade schools.

—Macon, Ga. The new boys' high school has been named Lanier High School, and the girls' high school the Pearl Stephens High School.

—Mt. Gilead, O. Facing a shortage of funds, the school board has called an election to vote a three-mill levy in November. Only eight months' school was possible last year and funds are still short this year.

—Lynn, Mass. The school board estimates that it will be \$12,883,000 in arrears by January 1, 1925. A financial statement submitted to the board shows that the estimated receipts for this year are \$1,259,095, while the estimated liabilities are \$1,272,978.

—Opposition to the proposed \$9,000,000 school bond issue for Oakland, Calif., has been made by the local improvement club. The bond issue which is sponsored by the Safe Schools Society provides that a business administrator shall handle the expenditure of the money. It also provides for a smaller bond issue for the purchase of land and a direct tax for school buildings.

The passage of the bond issue, according to the school authorities, means that approximately \$200,000, obtained annually by special levy, will be released for repairs when sufficient funds have been provided for new buildings. Plans for buildings have been standardized under the direction of W. E. Whalen, who has been placed in charge of the program. Under this plan,

(Concluded on Page 76)

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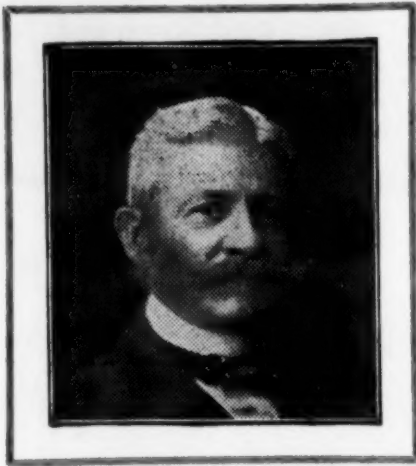
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(Concluded from Page 74)

the board is confident that estimates will be carefully worked out in an efficient and business-like manner.

—Sioux City, Ia. The board of education has awarded the general contract for the construction of the new Central Junior High School to cost \$273,000. The estimated cost of the completed structure will be \$350,000.

The Central Junior High School will complete a group of four junior high schools erected to serve the immediate junior high school needs of the city. The building will take over the continuation work for the city, also the pre-vocational work, and some vocational courses not taken care of in the remaining junior high schools. The building will be completed ready for occupancy in a year's time.

—Harrodsburg, Ky. A new high school costing \$70,000 has been occupied for the first time this year. The building, which is two stories high, is built of red brick, with white stone trimmings. It was erected under the supervision of Nevin, Wischmeyer & Morgan, architects, Louisville, Ky.

—Upton, Mass. A three-room school now under construction will be completed in the near future. The building is a model village school and is the gift of Mr. G. W. Knowlton.

—A number of special elections will be held in Cuyahoga County, Ohio, on November 4th, in connection with the general election. Local propositions referred to the voters for approval or rejection, by municipal governments of the county, are:

South Euclid village school district—A bond issue of \$500,000 for new school buildings and additions to present outbuildings.

Cleveland Heights—An additional tax levy of not to exceed three mills for not more than five years for school purposes.

Cleveland Heights—A bond issue of \$1,500,000 for the purpose of erecting school buildings and the construction of additions to existing schools.

South Euclid village—An additional tax levy of three mills for five years for school purposes.

Garfield Heights—A bond issue of \$110,000 for constructing a fireproof schoolhouse on the Maple school site and for building a gymnasium and auditorium for Garfield school.

South Euclid has asked the voters to pass a proposed bond issue of \$410,000 for a new high school.

—Dayton, O. The school board has asked the voters to approve a bond issue of \$4,000,000 and a tax levy of two mills on the dollar at the school election to be held November 4th.

—Mission, Tex. The corner stone for the new high school was laid in September.

—Schenectady, N. Y. The school board has adopted a budget of \$1,700,000, which is an increase of \$100,000 over that of last year.

—Winlock, Wash. The voters of School District 202 have approved a special five-mill levy for school purposes.

—Youngstown, O. The school board has warned that if the special tax levy of 1.6 mills is not renewed at this time, it will mean a radical reduction in salaries and personnel.

—Canton, O. The school board has approved the proposition of a bond issue of \$1,800,000 to be submitted to the voters at the November election. The approval of the bonds will permit the carrying out of a three-year building program to take care of immediate needs and future increases in enrollment.

—Harrisburg, Pa. The school board has adopted a recommendation calling for the submission of a new high school bond issue at the November election. The plan provides for an expenditure of \$1,200,000 for the John Harris high school and \$550,000 for the completion of the William Penn high school.

—An enlarged school program providing for a new senior high school and for an expansion of the grade schools has been proposed by G. D. Henderson, member of the school board at Little Rock, Ark. The estimated cost of the program is \$1,750,000.

—Washington, D. C. Municipal Architect A. L. Harris has recommended that sites for school buildings be purchased in advance of building operations in order to make possible a careful study of problems arising in the construction. It has been noted that recent appropriations for schools have been insufficient due to the character of the site, the subsoil, or other features affecting the cost and the design.

In the erection of a school several items enter into the cost of the structure, namely, cost of drafting and printing; cost of topographical

survey; cost of sewer, water, gas and electrical connections and charges of various departments of the city government. In addition, the board is constantly increasing the number and character of the facilities for schools, such as principals' offices, teachers' rooms, private toilet facilities, kitchenettes, and stage equipment.

—Mamaroneck, N. Y. The corner stone of the new high school was laid on September 24th with impressive ceremonies. Dr. G. M. Wiley, assistant commissioner of education of the state, was the principal speaker of the day. In addition to a modern school structure, provision has been made for a large athletic field.

—At the regular election in November, the school board at Hamilton, O., will submit a proposition for an extra school levy of 2.18 mills to meet the additional requirements of the schools and to replace a levy expiring this year. The proposed levy is for one year in anticipation of a reappraisal of property in 1925.

—Corpus Christi, Tex. A tax rate of \$1 on each \$100 valuation has been set by the school district for the coming year. The board has also authorized the issuance of independent school district bonds in the amount of \$125,000. Each bond is in the denomination of \$1,000 and bears interest at the rate of five and one-half per cent per annum. The bonds mature in forty years but may be redeemed at the end of ten years.

—Fort Dodge, Ia. The school board has approved an order providing for the admission of the East Lawn section into the Fort Dodge District. This section was formerly a part of Cooper district and the children were obliged to attend the township school located a mile and a half from their homes. As a result of the change, the children attend the Fort Dodge schools and the parents pay an increased tax rate.

—Edgewater, N. J. The corner stone of the \$195,000 addition to School No. 2 has been laid with appropriate ceremonies.

—Chicago, Ill. The city schools will in 1925 benefit from the building fund tax of 75 cents approved by the voters in November, 1923. The tax produces a building fund of about \$4,000,000 and makes necessary some definite plans looking toward increased building construction. Supt. William McAndrew has begun work upon a building program which will be extensive

(Concluded on Page 78)



106
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These handy Box Lockers fill the need for small storage spaces in modern schools. For books, gymnasium suits, etc. Furnished with spring bolt locks or hasp and eye for padlock as shown in detailed illustrations above. Two-coat baked enamel finish in French gray or olive green. Send for Locker Catalog A-2.

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(Concluded from Page 76)

enough to utilize all the funds available for the next two years.

In connection with the program, experts have made an intensive study of overload, overlapping, population trends, and similar factors with the idea of ascertaining where the needs are most urgent and where the money will do the most good. Among the first of the relief measures will be the reduction of portables. There are 524 of these in congested sections. Next year they will be reduced by at least 150.

The existence of a distinct shortage in accommodations is revealed in a study of school-housing covering the five-year period from 1919 to 1924. The increase in needs of the elementary schools amounted to 1,400 rooms. There were 625 schools built and 200 are under construction. The increase in high school attendance during this period created a need for 681 rooms. Only 56 schools were built, 93 are nearing completion, and 41 are under construction.

In May a group of specialists headed by Homer Davis, and including E. D. Cline of the University of Iowa, C. E. Lang, A. L. Weeks, W. E. Hedges and H. H. Seabloom began a technical survey of the school plant. The experts charted in detail the shortage of seats as distributed throughout the city. They have utilized the study of population tendencies used in the formation of the zoning ordinance, the researches of the telephone company, and the several building permits. All regions have been classified in the order of urgency as indicated by the congestion, and platting maps have been used for reducing overlapping of school centers.

The proposed program includes the location of elementary schools, junior and senior high schools. It seeks to reduce the number of surplus rooms to a minimum and to reduce congestion. To make the erection of buildings more rapid, typical structures have been designed for elementary, junior high and senior high schools. These can be erected in units as needed with the result that the time elapsing between the recommendation for the building and its occupancy is reduced by one-half.

It is planned to reduce congestion through various other devices. A readjustment of the school system will be attempted to obtain a wider use of the school plant. The platoon plan is to be inaugurated as an experiment in re-

ducing the seat shortage and in enriching the educational opportunities.

—Leavenworth, Kans. A junior high school building accommodating 850 students has recently been completed. This building is the fourth of a series of five in a building program adopted by the board.

Leavenworth also has a fourteen-acre athletic field in process of development. The cost of the field and the grading approximated \$20,000. The field was purchased and developed to its present state of perfection by the citizens, directed by a committee from the rotary club. It has been given to the board of education for the use of the schools.

—Chanute, Kans. Following a comprehensive survey of the city schools conducted by the Research Bureau of the University of Kansas, the board of education is in possession of important facts bearing on the problem of a school building program and means for financing the same. The board has employed the architectural firm of T. W. Williamson & Company, of Topeka, to undertake the architectural work in connection with the proposed building program.

—The board of education of Weehawken, N. J., has awarded a contract for painting to a New York City contractor who was 80 per cent lower than the local contractors. The Hoboken Observer in commenting on the matter says: "The New York man is in business for profit and he probably entered the bidding on a purely business basis, content with a reasonable profit and not, as many contractors, with an idea of mulcting the public coffers. It would be well for local officials hereafter to foster competition with out-of-town bidders to bring local contractors to their senses. The Jersey Observer wants to see home trade patronized, and it should be, but not when it becomes apparent that the local individual is seeking to 'rob' rather than sell to provide, perhaps in some instances, for the 'rake off' demanded by corrupt officials. The Weehawken board, to its credit be it said, is conducting its affairs on a business basis for the benefit of the taxpayers."

—The new consolidated high school located near Matlock, Mason County, Washington, has been named the "Mary M. Knight school" in honor of a woman who taught school for many years in the vicinity and who also served as county superintendent.

—In arguing for a \$2,500,000 school bond issue as against a \$4,000,000 issue, the Omaha, Neb., World-Herald says: "A trip to Europe is not a good education for a high school youth if that means that 'dad' must go to the poorhouse. Similarly, in less degree, an extravagant education is not good for the 'kiddies' if the burden of taxation thereby becomes oppressive. The 'kiddies' must live and labor and make their way in Omaha after they receive their education. A crushing tax burden will not help them to take advantage of a fine education."

—Marlborough, Mass. A junior high school costing \$175,000, and a grammar school costing \$150,000 are in process of erection at the present time. Both buildings will be completed ready for occupancy in September, 1925.

—Wilmington, O. An addition to the high school has recently been completed at a cost of \$125,000. The school system has been reorganized on the six-three-three plan this year, permitting the organization of a junior high school with an enrollment of 450 pupils. The city of Wilmington is one of the few cities in the state of Ohio which is operating without incurring a large indebtedness. The total bonded indebtedness of the school district is estimated at about \$160,000. All bonds issued are for building purposes.

—Special exercises in connection with two new high schools have been announced by Assistant Supt. Harold G. Campbell of New York City. Formal exercises in connection with the laying of the corner stone for the addition to the High School of Commerce were held on October 7th.

The Thomas Jefferson High School was formally dedicated on October 6th, when Mayor Hylan delivered the dedicatory address. This building, which is in charge of Dr. Elias Lieberman, has been in use since September 15th, when it was opened to students.

—Princeton, Ky. A new school building costing \$140,000 is nearing completion at the present time. Of the entire cost of the structure, \$60,000 was raised by means of a campaign for funds.

The building which is entirely modern in every respect, contains a separate gymnasium and auditorium. In addition to a large gymnasium, there is a play court 85 feet by 40 feet in size.



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After all, why not base your so-called "regular work" on a thoroughly worked-out course in ear training, in music literature, sequential, constructive, beginning somewhere purposefully, leading on progressively, arriving logically at the end of the elementary grades with a love for beautiful music—a working knowledge of instruments, rhythms, themes, simple form, and a music vocabulary acquired of some hundreds of exquisite melodies, tunes and rhythms—reactions that will not only furnish a sound basis for music work in junior high and high school, but will have implanted the love of and taste for finer music for life?

Such a course is found completely worked out in definite lessons for each year from First to Sixth in our "Music Appreciation with the Victrola for Children."

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School officials, who are responsible for the protection of the lives of the pupils and are anxious to make proper provision for quick exit in case of fire or panic, will find in

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an adequate equipment which meets all conditions. The Sargent Cylinder Locks with which they are fitted provide for complete security and prevent entrance from the outside of the building when school is not in session, while they can be arranged to permit entrance during school hours, if desired.

Quick Exit at All Times

is provided and in case of necessity the doors can be instantly opened by slight pressure on the handle bars at any point.

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close the doors, during their day by day use, quickly and quietly, the application shown in the illustration with the Sargent special foot (No. 35) being particularly desirable.

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Other cities are following the Oak Park plan—fencing as fast as funds permit, and choosing PAGE for positive, *lasting* protection.

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Plan now to install this durable protection around your schools. The PAGE super-heavy zinc coat, approximately **5 times heavier** than that on ordinary galvanized wire, assures rust-resistance, makes PAGE the most economical wire-link fence made. Write for the address of the nearest distributor, who will furnish plans and estimates promptly, and for the new PAGE FENCE BOOK, showing typical installations. Address

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PAGE

PROTECTION FENCE

DAHLSTROM

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Fire exit doors should be of steel. They are doors that must be depended upon in case of fire. Not to stop a fire, but to work properly. There have been cases where wood doors have swelled to a point beyond operation, which had there been a fire before this was discovered might have proven serious.

Dahlstrom Standard Exit Doors are built of metal. They cannot warp or swell with climatic changes. With proper floor and wall construction around them they will operate smoothly and easily.

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SCHOOL BOARD NEWS

—Cardington, O. The school board has authority to bar unvaccinated children from school according to a recent decision of the Common Pleas Court, in a petition seeking to enjoin the board from enforcing such a rule. It was held that a state law which empowers boards to put into force measures for protecting children, also gives them authority to prevent unvaccinated children from attending classes.

—On behalf of his ten-year-old daughter, W. E. Hurteinne of Manitou, Wash., has filed suit for \$1,000 against the school district. Mr. Hurteinne alleges that his child fell over some boards left in the school yard and fractured her arm.

—Spokane, Wash. The school board has begun work on plans for the care of a new suburban district. The board will be ready in the spring to take over the Hillyard district, the merger taking effect on June 30, 1925.

—Under the Utah law, boards of education can be compelled to furnish schools for high school students under their control, according to a recent opinion of Attorney-General Harvey Cluff of that state. The attorney-general points out that if citizens refuse to be bonded to erect a high school building, it becomes the duty of the board to use the funds at its disposal toward securing high school facilities.

The board of education of Weber County has on two different occasions within the past two years submitted a bond issue to the taxpayers for the purpose of building and equipping a high school, and the proposition was in each case voted down by a small majority.

—State Supt. V. M. Riegel of Ohio has called the attention of superintendents to a new ruling regarding the operation of passenger automobiles for transporting school children. Under

the ruling, school bus drivers are exempt from paying the usual fee for license tags when the busses are owned and operated by boards of education. Privately owned busses are not exempt from paying the fee.

—The Preemption consolidated school board of Mercer County, Kentucky, under a recent ruling of the Court of Appeals, has been ordered to open a school in the district even though there is no suitable building. The district has been established for some time but no building has been provided. The proposition to build had been defeated in two elections, and since the last location had not been entirely suitable, the board decided to send the pupils to schools in the vicinity. School is now being held in an old church in the vicinity but this does not meet with the approval of the opposing faction, which holds that a better building is required under the court's ruling.

—The high school board of Stonington, Ill., has been made defendant in a suit brought by residents of five sections of Stonington Township, asking to be detached from the district in order that they may be merged with the Blue Mound District. The high school in the latter district is from 1 1/4 to three miles from the homes of students, while the Stonington high school is 4 1/2 to 6 1/2 miles distant.

—The school board of Stanton, Ia., has been served with an injunction asking that it be restrained from preventing the attendance of children in the local orphans' home. The school board had refused to admit the children because the home officials had failed to pay a tuition bill of \$224.

—The directors of the Frazier School District, near Little Rock, Ark., were recently restrained from completing the proposed purchase of two acres adjoining the school building. It was alleged that the taxpayers were not financially able to bear the additional tax and that the present facilities were ample. Pending the final hearing of the case, the directors were enjoined from buying the land and the taxpayers were required to file a bond of \$1,500.

—Under a recent order of the Kentucky State Board of Education, a modern method of keeping child accounting records will replace the former high school record book. The new system provides for permanent record card systems

in the larger high schools and loose-leaf systems for the small schools.

—The west side school board of Saginaw, Mich., has purchased 2,600 tons of coal, the contracts going to the dealers whose samples showed the greatest value on the B. T. U. basis. Changes have been made in the heating systems of several of the schools which are expected to save 600 tons of coal this winter.

—The school district of Port Arthur, Tex., has taken action toward cleaning up \$20,000 in delinquent taxes due the schools. Mr. A. A. Gunter has been employed as attorney to handle the legal phases of the collection work.

—The school board of Cleveland, O., has reorganized the business department with the completion of two appointments and four promotions. Mr. George H. Hopkinson has been appointed superintendent of buildings, in charge of 150 or more school buildings. Mr. J. J. Kissack will act as superintendent of plant operation, in charge of the custodial staff. Other changes are the promotion of Mr. H. C. Hinckle, from assistant superintendent of stores to assistant secretary in the office of the director, Frank G. Hogen; Mr. E. U. Widney, from assistant director to division manager in the division of school architecture; Mr. James H. Duthie, from division manager in the division of architecture to director of architectural research, and Mr. Lynn J. Murray, from supervisor of operation to custodian in the Collinwood Junior High School.

—Dayton, O. Upon petition of parents, the Common Pleas Court has been asked to grant an injunction restraining the school board from segregating 150 colored pupils in four rooms of the Willard School. J. P. Jetton, an attorney representing the parents, said they would insist that the classes be abandoned. The school officials hold that the classes were designed to give special instruction to backward children. The parents attack the classes as unconstitutional because no white pupils were included.

—The school board of Shawnee won a victory in the District Court of Pottawatomie County, Oklahoma, when the court sustained a mandamus against the excise board asking county officials to approve a revised board estimate of \$10,000 for separate schools. The original estimate of \$17,000 had been reduced to \$10,000 by



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Corridor Lockers are out of the way, yet close to the entrances and exits, eliminating confusion at dismissal time.

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the county commissioners, and the excise board made a further reduction to \$7,000.

—Barker-Somerset, N. Y. The board of education, members and wives, informally entertained the faculty of the high school on September 8th. The evening was given over to music and speaking, followed by a lunch. A feature of the evening was a visit to the new school addition. The faculty for the present year comprises many new instructors and the occasion was made a means of getting acquainted.

—The state board of education of Connecticut has upheld a decision of the Hartford board in refusing admission of three children to the West Middle School because they were not vaccinated. It was held that the board was within its rights in refusing to accept the exemption certificates offered in lieu of vaccination. The certificates were refused on the ground that the physicians who signed, did not meet the requirements, and further that they gave no adequate reason for exempting the children.

—The common council of Syracuse, N. Y., has failed to approve a proposal of the board that it forego competitive bidding in the purchase of equipment for a new school. President C. G. Hanna of the council took a decided stand against the proposal and it is expected that a number of the aldermen will follow his leadership. Mr. Hanna argued that competitive bidding should be practiced in the purchase of all materials, regardless of who needs them. He believes it is wrong to buy without competitive bidding.

—The school board of Oklahoma City, Okla., has adopted the policy of closed sessions for the future. The board has adopted a resolution providing for the appointment of a purchasing agent for the schools.

—Akron, O. Criticism has been directed against the school board for lack of economy in buying school seats. Mrs. M. Haupt, state examiner, in a report to the state auditor, Joseph Tracy, relative to the schools of Summit County, holds that the schools will be compelled to operate without extra money due to the condition of the finances.

In the report there were several instances of illegal payments of small sums, which had been made as a result of errors of judgment. The

Akron board's sinking fund commission was criticized for paying \$65 to a Cleveland firm for examining bonds where there was no authority for such expense.

On the subject of overpurchase of seats by the Akron board, the report showed that 1,236 more seats than necessary were purchased. To buy seats without any assurance that they will be used is poor business, according to the report.

It was pointed out that thirteen items in the 1922 findings, referring to a total of \$4,513 to be paid back to the school treasuries had not been paid. These were items for expenses attending conventions, excess compensation, etc. Seven instances were cited where school board members and employees must refund \$1,270 on similar complaints. It was noted that the work in Summit County has been so systematized that there were few errors, and these were easily adjusted.

—The court of Camden County, New Jersey, has begun an investigation of a complaint that a teacher had been refused a position in Berlin Township on account of her religion. Under a law of New Jersey, a school board or municipal body which inquires into the religious faith of an applicant may be dismissed from office.

—The school board of St. Joseph, Mo., has disapproved a proposal of Mr. B. G. Voorhees that a bill be outlined providing for a separate election for school directors of the district. The board was unanimous that it should take no part in the matter but leave it to the residents to make any changes in the method of nomination and election. Under the present law, school board nominations are made by the two political parties and the nominees are voted upon at the time the mayor, council and other city officers are elected.

—Supt. P. C. Stetson of Dayton, O., proposes a new method of combatting truancy in the schools by going at the source of the trouble. In a recommendation presented to the board, Mr. Stetson asks that the attendance department be reorganized, providing for the employment of a group of so-called "visiting teachers." These teachers will go into the homes of reported truants, make observations, detect possible causes for the condition, study the cases and

provide remedies for offsetting the tendency toward laxness in attendance.

The new plan will, it is believed, relieve the attendance department of a large burden and will eventually prevent the sentence of large numbers of children to reformatory institutions.

—School districts in the state of Washington have no power to purchase liability insurance under the law, even though such insurance is recognized as sound, according to a ruling of Attorney-General John H. Dunbar of that state. Mr. Dunbar holds that school district officers have only such powers as are conferred by law, and their only remedy is to secure new laws from the legislature.

—The Circuit Court of St. Louis, Mo., has denied an injunction seeking to prevent the school board from carrying out a contract for playground apparatus at 33 schools. Suit was recently brought by citizens, who contended that the apparatus was of inferior quality and not according to specifications. The contract called for the erection of \$25,000 worth of playground equipment.

—Motions against the suit of George Harvey, brought against the school board of Davison, Mich., for alleged dismissal from a teaching position, were defeated recently, when the court refused to dismiss the case or to require security for the cost of the suit. Harvey sued the Davison board for wages from the time of his dismissal last winter until school closed in June.

—The schools of Rapides Parish (county), Louisiana, are under the control of one board of fifteen members, which is to be reduced to twelve in the near future. There are in the parish 65 schools for white children and 35 for colored children. The teaching staff numbers 300 white teachers and 75 colored teachers, divided among nine high schools, four elementary schools and a number of small rural schools of the one, two, three and four-teacher type. The construction of good roads has brought consolidation to many schools and has made it possible to transport pupils in the upper grades to state approved high schools.

—Greensburg, Pa. The taxpayers of Derry township have asked the court for an order showing cause why high school directors of the township should not be removed from office.

(Continued on Page 84)

COLORMIX

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COLORMIX FLOORS—durable, hardened concrete PLUS the charm of permanent colors—solve the problem of artistic floors at low cost. Colormix transforms cold, unattractive concrete into a sightly, decorative surface—creating a cheerful atmosphere at a cost but slightly greater than that of ordinary concrete.

Colormix employs a new principle in coloring concrete. Dissolved in the gauging water of the floor topping, it dyes every particle of sand and cement a deep rich color. At the same time Colormix increases the tensile and compressive strength, producing in one operation and at a comparatively low cost a hardened, non-fading concrete floor. Colormix Floors are the practical equivalent of floors built of far more expensive materials.

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How to reduce maintenance costs on your-

Roof—If you have a roof that is badly worn, do not replace that roof. If a leak or two develops you don't have to call in the roofer. Coat that roof or stop that leak with Stormtight, the elastic rubber-like material that makes a roof absolutely waterproof. Made in semi-liquid or plastic form, Stormtight can be applied in a few minutes by anyone over any roofing material. Not a stopgap but a permanent protection.

Painted Surfaces—Some paints are more suitable for school use than others. Do not be guided too much by the advice of your contractor, for his choice is influenced somewhat by the profit he can make on each gallon. One paint especially suitable for schools is called Cemcoat. It can be obtained for both interiors and exteriors either in white or colors and in a gloss, eggshell or flat enamel finish.

Rooms painted with Cemcoat are bright and cheerful. This paint stays white long after other paints turn yellow. It can be washed again and again without yellowing, and after each washing the walls

look like new. Also, because of its body Cemcoat requires one less coat as a rule. Cemcoat for exterior use is particularly durable. It adheres to brick and cement almost as tightly as wood, for free lime does not affect it.

Then for study halls, library, etc., there is Sonotint. This paint is peculiarly restful to the eye, for walls painted with Sonotint have a soft mellow tone, free from glare.

Floors—Beware of the dust that rises from a concrete floor. This dust is hard and sharp. It is harmful to lungs and injures clothes and equipment. More than that, it is the forerunner of floor repairs. Holes, hollows and worn patches follow in its wake. You can forestall the dust and the floor repairs, however. An application of Lapidolith will do the trick.

Lapidolith is a liquid chemical that looks like water. When flushed on a floor, however, it penetrates the coarse pores of the concrete, changing its texture by chemical action to a fine, even, close-grained topping of crystalline formation.

This topping is flint-like in its hardness. It is dustproof, wearproof, waterproof. It resists the hardest kind of service for years without showing the slightest sign of dust or wear. In the leading industrial plants of the country you will find Lapidolized floors, hundreds of millions of feet of them.

If your floors are of wood, do not bother with messy floor oils that merely coat the surface and have to be applied again and again. If you would really prevent floors from splintering, rotting or drying out, treat them with Lignophol. This floor dressing penetrates and preserves the wood, restoring its natural oil and gum. One treatment lasts for a number of years and keeps floors smooth, hard and sanitary. Lignophol is non-inflammable.

Exterior Walls—You know how water seeps through walls and brickwork in a driving rainstorm. Yet it is simple to insure warm, dry interiors. A material called Hydrocide Colorless renders brickwork impervious to moisture. It is simple to apply, permanent and invisible.

Send for literature giving further details on the products that are of particular interest to you.

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L. SONNEBORN SONS, Inc.

New York City

(Continued from Page 82)

The taxpayers claim the directors exceeded the authority of their office in building a new high school costing more than the funds provided by the township. This action resulted in an increase in taxes and the taxpayers promptly asked for the removal of the directors.

—Warren, O. The school board has prohibited the use of school buildings for religious services. In accordance with this ruling, the board has asked two religious congregations to vacate the schools used by them for religious services. The board held the use of school buildings for such use is in direct violation of the state constitution.

—East Alton, Ill. A proposition to change the length of term of the president of the school board has been approved by the residents. A new law permits a chairman to be elected for a term of two or three years, instead of one, provided the residents so vote. In the future, the president will be elected for a three-year term the same as other members of the board. Mr. John Jones is the present incumbent of the office.

—The Buffalo, N. Y., board of education has decided to prohibit all prize essay contests in the schools. "Our only objection to the prize contest idea," says Charles B. Hill, the member of the board who introduced the resolution, "is in the multiplicity of such demands upon the time of the faculties and children of the schools. Such contests have become sufficiently numerous of late to interfere seriously with the regular curriculum of the schools. Practically all requests of this kind made to us have considerable merit and we found that it was practically impossible to relieve the situation by attempting to limit our efforts to a few contests during the year. Therefore, our only solution was to say no to any and all requests."

—In opposing the reappointment of a married woman teacher Director Thorkelson of the Racine, Wis., board of education said: "Educators all over the country have adopted the policy of asking married women to quit teaching. The woman who has a husband able and willing to support her hasn't the same financial interest in her job that the unmarried woman has."

—Citizens of Ashley, Pa., have sought by legal

action to secure the removal of the school board. The residents, most of whom are Democrats and therefore of opposite political parties to the members of the board, charged violation of the school laws. This is denied by the six members of the board, Louis O'Donnell, Malcolm T. Johnson, Frank Lindemuth, Henry Reimer, Clement Jablowski, and R. M. Ayres, who stand ready to prove that they acted within the provisions of the code.

—In several Missouri cities dissatisfaction is expressed over the present law providing for the election of school board members. It makes the election of school board members coincident with general elections and employs the party label in the presentation of candidates.

—Miss Carolyn Merchant who is a member of the New Haven, Conn., board of education and at the same time principal of a school will not be reappointed to the former office. The mayor who makes the school board appointments holds that Miss Merchant cannot legally hold both positions.

—When the Chicago board of education sustained Superintendent William McAndrew, in holding that the teachers' council should not be held in school hours, Miss Margaret Haley of the teachers' federation said: "The school board can change its rules whenever it sees fit. The legislature is the only remedy for this situation." Thereupon the Chicago Herald responded by saying: "Well, we should say it was a remedy better avoided. Maybe the superintendent should run the Chicago schools, maybe the board should run them, maybe Miss Haley should; we don't know positively. But we are pretty positive the Legislature should not. To that extent we fancy home rule has a right to be considered."

—New York, N. Y. The school board has taken action limiting the collection of funds by school children.

Following a report on the matter submitted by Supt. W. J. O'Shea, the board has ordered that a plan be devised for regulating these collections. It was found that during the year covered by the report, September, 1922, to the close of the spring term in 1923, 339 schools or 71 per cent, had maintained a permanent or continuing fund. During the same period, 85 per cent of

the high schools had maintained a similar fund known as a general organization fund. In addition to these funds, schools had also raised money for various school purposes and activities, other than those maintained through the permanent funds. About 80 per cent of the elementary schools, and 85 per cent of the high schools raised money in this way. The total amount collected for these purposes amounted to \$400,000.

The report disclosed also that money had been expended for numerous and diverse purposes, ranging from purely legitimate ones, to others involving the purchase of supplies and making of repairs.

—Architect Frederick S. Harrison of Sacramento, Calif., has been given judgment against the Herald school district of Sacramento County, for \$319 and costs. Harrison had been retained by the Alabama school district before it was changed to the Herald district and had not been fully paid for his services.

—Spokane, Wash. The educational committee of the local labor council has upheld the board in the enforcement of a rule against married students in the high schools.

—Eatonville, Wash. Schools and business were resumed on September 24th after the danger of a forest fire had been removed. A survey of the district burned showed several places wiped out and others reported as burned out still intact.

—The court has recently given a decision in the case of W. B. Whitt against the board of education of Ashland, Ky. Suit was brought against the board following the adoption of geography textbooks in which the Kentucky supplement had been omitted. The court held that the board had acted in good faith and that it had a right to order a text even after a suit had been filed.

—Detroit, Mich. The school board has adopted a rule providing that where a clerk is absent on account of the death of a member of the immediate family, or a relative with whom he makes his home, no deduction shall be made for a period not to exceed five days.

—Hammon, Okla. The \$45 apportionment recently declared invalid by the Supreme court,

(Continued on Page 87)



The interior of the Hempstead High School, L. I., N. Y., ALWAYS looks new—because Hockadayed. Ernest Sibley, Architect.

Multi-Wash Painted Walls

Hockaday painted walls are unique in that multiplied washings and scrubbing with soap and water will not destroy the paint film. Such walls are non-porous and impervious to water. The dirt washes OFF—not IN, consequently a washed Hockadayed wall looks as new and bright as when the paint was first put on. There are no accumulated layers of "clean dirt"—no breeding spots for germs and bacilli. A washed Hockaday wall is CLEAN.

Hockaday walls do not air-crack. There can be no limeburns because lime in plaster cannot destroy the secret process binder used in Hockaday paint. Therefore, Hockadayed walls last from six to twelve years. Also, quantity for quantity, Hockaday will cover more surface, saving in time, labor and paint. You can never go wrong with Hockaday, the better, economy paint.

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Devoe Velour Finish is a high quality flat oil paint noted for four important characteristics:

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- 2—its clarity of color, even after long exposure to the sunlight.
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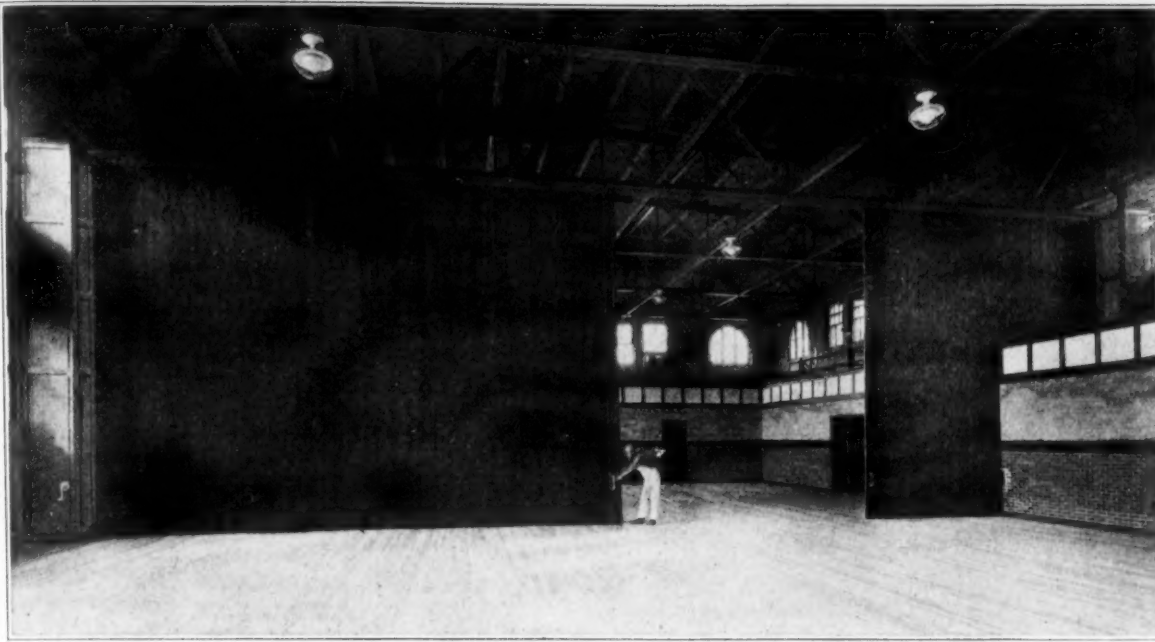
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Oakland, California

(Concluded from Page 84)

means that the school year will be shortened by one month, according to the president of the board, J. L. Caffee.

—Mr. J. George Herlihy, formerly chief clerk of the Boston schoolhouse commission, has been unanimously elected assistant business agent, to succeed Alexander Sullivan. Mr. Herlihy's appointment took effect November first and carries a salary of \$3,500 per annum.

—Ashley, Pa. A bill filed by P. E. Flood, agent for school supplies, against the school board, has been dismissed by the court. Flood contended there appeared to be a pre-arranged plan to give a contract for desks to another firm. The bill was thrown out of court for the reasons that it was not endorsed, that it failed to show that it was filed for the benefit of citizens and taxpayers, and also that it failed to give information as to the date on which bids were requested or the date on which the defendants acted after receiving bids. In fact, it was not in accord with the rules governing equity cases handled by the court.

—Billings, Mont. The school board has approved a recommendation of the superintendent forbidding teachers to tutor pupils failing in subjects taken under them in regular classwork. The rule is intended to prevent misunderstanding and criticism of teachers.

—New York, N. Y. The budget committee of the board of estimate recently failed to approve the inclusion of an appropriation for paying medical examiners of teachers seeking disability pensions at the hands of the teachers' retirement board. The budget committee has reduced the request for \$6,000 for this purpose last year to \$2,280 allowed this year.

—Chicago, Ill. Supt. William McAndrew has been empowered by the board to "temporarily exclude" unvaccinated children where the evidence shows an impending epidemic of smallpox. The order was passed following a report of a case of the disease in one of the schools.

—St. Louis, Mo. The failure of the school board to approve proposed salary increases for teachers has not decreased the energies of the high school teachers' association which has just begun another campaign with the same object in view. The last campaign extending over a period of a year, failed miserably when the

superintendent submitted a revised scale to the board.

The new campaign was opened on October first, with a public letter in which it was alleged that costly school buildings are erected by permitting teachers' salaries to fall below the pre-war standard. The new Roosevelt high school, it was pointed out, is a "monument to the economic sacrifices of high school teachers." The letter further stated that while St. Louis school buildings are a matter of civic pride, it is certain that there has been a serious lack in efforts to excel in an equal degree in provisions for the economic welfare of the teaching staff.

—It has been recommended by the parent-teachers' association of Chattanooga, Tenn., that the six per cent tax limitation law be repealed. The present tax rate is deemed low. The education of a child in the Chattanooga schools is estimated at \$56 a year. The average shown by 93 other cities is \$88.

—The board of education of Springfield, Mo., recently ordered an audit of its accounts by an expert and made the report public. This action dispelled false impressions which had gained ground as to certain expenditures.

—The school board has awarded a contract for the erection of a three-room school at Shirley Center, Mass. The building will be erected on a site given to the town for school purposes, and its architectural style will be in harmony with the surroundings. The building has been planned, and will be erected, under the supervision of the Frank Irving Cooper Corporation of Boston.

—Beverly, N. J. The city hall has been given to the schools for educational purposes. The building is being remodeled at a cost of \$10,000 and will be used exclusively for colored pupils.

—Cincinnati, O. The total levy for schools for the year 1925 has been fixed at 6.59 mills, a reduction of .68 mills over that of last year. The total tax rate for the year will be \$20.21 for each \$1,000 worth of taxable property, or \$1.57 less than the rate for the last year.

—Moneys collected from pupils in the public schools of New York City since 1917 amount to \$210,502,038.90, according to a report of Superintendent William J. O'Shea. Of this amount, \$202,171,250 went into Liberty bonds and \$6,483,772 into war savings stamps. The balance went into charity calls, such as the Red

Cross, war hospitals, fatherless children of France, Salvation Army, Near East Relief, Louvain Library, Japanese Relief Fund, etc. etc. All collections in the schools are subject to formal resolution by the board of education.

—A bond issue of \$220,000 for a new high school was carried by a vote of 130 to 103 at West Bend, Wis.

—Minden, La. Webster Parish has completed seven new brick schools in the last fifteen months, at a cost of \$500,000. Webster Parish has 98 per cent of all white children in school at the present time.

—Liberal, Kans. A new high school costing \$200,000 has recently been occupied. The building is modern in every respect and contains space for an auditorium seating 1,000 persons and a gymnasium 70 feet by 100 feet in size. The building is fully equipped to meet the needs of the high school.

—Lawrence, Kans. Construction work on the Woodlawn elementary school, in North Lawrence, has progressed satisfactorily, and it is expected that the building will be ready for occupancy on January first. Mr. William B. Ittner, St. Louis, Mo., is the architect of the building.

—The corner stone of the new junior high school at Hopkins, Minn., was laid with appropriate ceremonies on September 24th. The structure which is 120 feet by 153 feet, is thoroughly modern and fireproof, and cost \$186,000.

The building is located on a five-acre site, near one of the main highways. It consists of two wings, housing the junior high school and the grades, together with an auditorium and gymnasium occupying the central portion of the building. A study room seating 150 pupils, and an auditorium with accommodations for 900 persons, have been provided. The gymnasium, in the rear of the auditorium, will be used by high school as well as grade pupils.

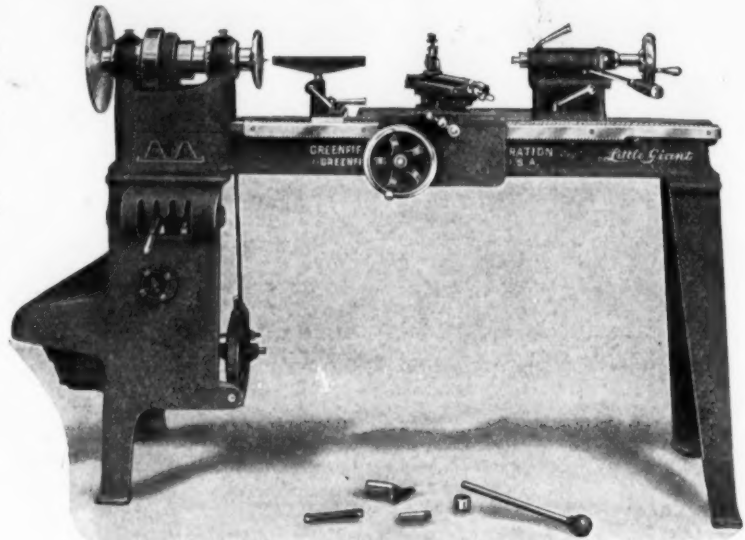
—Alexandria, Va. A tract of fifteen acres has been purchased as the site for a high school building. Plans for a structure costing \$900,000 have been prepared by Architects Favrot and Livaudais, of New Orleans. In addition to this building, the board also plans the erection of an elementary school to cost \$150,000 to \$200,000, and a school for colored children to cost about \$100,000.

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And yet ten to one you weren't lucky enough to even have "Manual Training." Boys didn't in those days.

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PERSONAL NEWS OF SCHOOL OFFICIALS

—Mr. George M. Hopkinson has been appointed superintendent of school buildings at Cleveland, O. Mr. Hopkinson was formerly director of research in the construction of school buildings.

—Boonville, Mo. The school board has been reorganized, with the election of Roy Williams as president, T. F. Waltz as secretary and F. T. Renshaw as vice-president. John Piggott, F. G. Lohse and H. C. Johnston are the other members of the board. The new members succeed the former board of six members who resigned as a result of their inability to agree on a choice of a superintendent. The new board has reelected C. E. Crane as superintendent for the present school year.

—Mr. Amandus D. Risdon, 87, a resident of Kirksville, Mo., died at a sanatorium at Macon on September 18th. Mr. Risdon was president of the Kirksville board for seven years and secretary of the board of regents of the Kirksville Normal School.

—A dinner was given on September 30th, at the Washington Restaurant, Newark, N. J., in honor of Peter A. Cavicchia, who was recently elected to the presidency of the board of education. The dinner was attended by members of the city commission, the board of education and friends of the president.

—Mr. Frank Mayfield has been elected a member of the school board at East Alton, Ill., to succeed the late W. F. Busse.

—Mr. W. J. Downing has been elected clerk of the school board at Butte, Mont., succeeding Richard Brimacombe.

—Mr. E. S. Jackson has been named to succeed Peter Ward, as treasurer of Dist. 7 school board, Royal Oak township, Berkley, Ia.

—Mr. John A. Wagner is giving his 27th year of continuous service as the efficient secretary of the board of education of Ottumwa, Ia.

—Miss Genevieve Laly, who has had charge of the part-time continuation school at Ottumwa, Ia., for several years, is giving half time to the city as policewoman. She serves as assistant to the school attendance officer, the two duties fitting in together very nicely.

—Dr. Daniel S. Latham, who has served as a member of the Providence, R. I., school board for twenty-seven years, has declined a reelection.

—Mr. David F. Dunn, the senior member of the board of education at Paola, Kans., tendered his resignation to that body on September first. Mr. Dunn had completed eighteen years of service as a member of the board. He is retiring from public service at the present time to return to the interests of a private citizen.

—Mrs. L. A. Meraux, for the past three years president of the school board of St. Bernard Parish, La., has been reelected for a six-year term. Mrs. Meraux was the first woman school board member in Louisiana and is at the present time the only woman president of a board.

—The school board at Detroit, Mich., recently adopted resolutions on the death of the late Justice George Scott. Justice Scott was responsible for the passage of the law providing for a seven-member school board.

—Mrs. Eleanor B. Speer has been elected president of the school board at Rutherford, N. J. Mrs. Speer has been actively interested in educational activities and has completed ten years' service as a member of the board.

—Dr. Frank B. Dyer, former superintendent of schools at Cincinnati and now a member of the board of education of that city, will deliver a series of talks on the geological history of parts of Ohio.

—Dr. George H. Robb, principal of the high school at Altoona, Pa., has been elected president of an organization of schoolmen, organized at the last conference of superintendents and principals of Pennsylvania.

The new body has for its purpose the holding of one fall meeting each year, to be known as schoolmen's week. The sessions will take place in the Lock Haven Normal School and will cover

a three-day period. The first meeting of the new association was held the first week in October, at Lock Haven, Pa.

—Dr. George Willard Frasier, on November 21st, was inducted into office as President of the Colorado State Teachers' College at Greeley. The inaugural ceremony followed an academic procession in which leading educators from different parts of the country, prominent citizens and students took part. The governor of the state presided at the inauguration, and the principal address was given by Dr. Charles McKenny, president of the Michigan State Normal College. Dean Ethan Allen Cross of the college delivered the address of welcome, while President Frasier gave the response. The formal presentation of the keys to the college was made by H. V. Kepner, president of the board of trustees. Dr. Guy Maxwell, of Winona Teachers' College, presided at the banquet which followed the ceremonies.

—Miss Helen A. Tegner, kindergarten supervisor of Huntington was elected president of the Northeastern Indiana Teachers' Association. M. F. Worthman, superintendent of the Decatur schools was elected secretary and treasurer. A. R. Fleck, principal of the South Whitley schools superintendent of Adams county was made a member of the executive committee.

—The Central Minnesota Educational Association elected the following officers: President, Paul R. Spencer, superintendent, St. Cloud; vice-pres., Elizabeth Clark, St. Cloud; secy.-treas., Karl Adams; Directors, Mary Gallagher, O. E. Smoth.

—Iowa State Teachers' Association, northeast division, President, A. C. Fuller, Cedar Falls; central division, President, Bessie Bacon Goodrich, Des Moines; northwest division, President, Fred B. Farmer, Storm Lake; south central division, President, W. G. Pence, College Springs; southwest division, President, Allen R. Niemann, Magnolia; southeast division, President, E. M. Sipple, Burlington; north central division, President, Supt. H. F. Jackway, Humboldt.

—In Bossier Parish, Louisiana, a parish-wide tax levy of two and one-half mills has been voted for 1924. In 1923, a similar tax was voted, so that the total tax for school purposes is now five mills.

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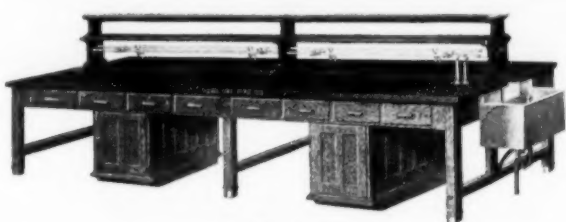
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Very popular with teachers. Very substantially built. Can be supplied, if desired, with lower cupboard and drawers.



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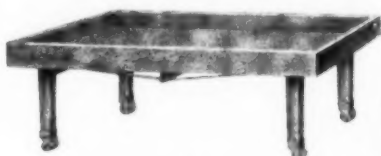
For the laboratory where floor space is ample and classes not too large. Accommodates 16 students in two sections.



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For laboratories where it is desirable to have students all face one way. This table accommodates two students.



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A necessary article for the kindergarten. Very rigid and will stand hard wear.



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STUDENTS' DOMESTIC SCIENCE DESK

For two students. One drawer and one cupboard for each; larger drawer used in common. This is a very practical desk.



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A desk for individual use. Equipped with all-steel non-breakable vise.



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Accommodates 8 students working in sections of four. Each student has one small drawer exclusively. The top tier of drawers and the cupboards are used in common. A two-gang set of Hubbell polarized plugs and receptacles is placed at each end of desk.

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We are in a position to make immediate delivery on all of our standardized desks and tables.

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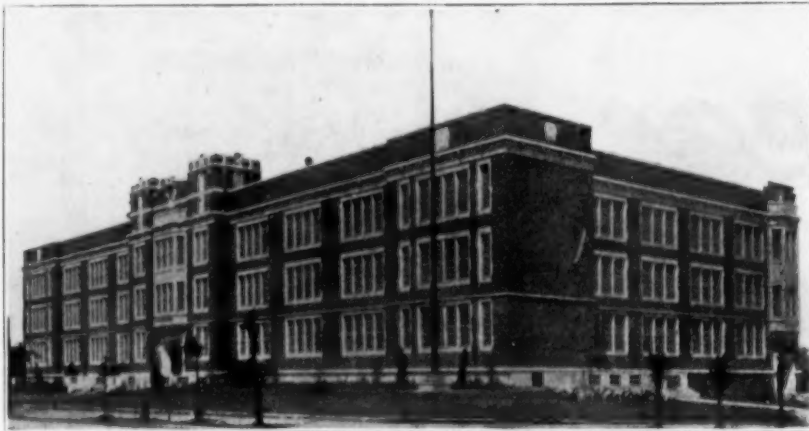
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The Birmingham Board of Education did not buy the cheapest lockers. They selected those which in their judgment, based on a careful comparison of samples and after taking into consideration the thorough satisfaction received from Durabilt installations in other Birmingham Schools, would give them the greatest dollar value in point of convenience, service and durability.

Other Birmingham School Installations are in the Ensley High School, the Avondale High School and the North Birmingham High School.

Hundreds of America's fine Schools are Durabilt equipped. Let us explain the advantage of a Durabilt installation to you.

We have information of inestimable value to prospective buyers of locker equipment. Write for locker folder No. 5008.

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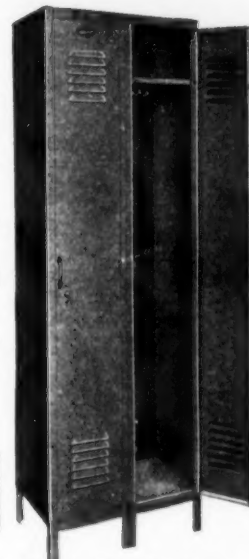
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A SUPERINTENDENT'S PLAN OF ADMINISTRATION

When J. O. Engleman was installed as superintendent of the Terre Haute, Ind., schools he presented to the board of education his viewpoint on the subject of school administration. Here is what he submitted:

"1. A successful administration of schools must always be based upon the recognition of the fact that the board of education is a legislative body representing the people and responsible to them. I shall count it my duty to give such advice as I may be able to give in the shaping of legislative policies and when you have finally determined upon such policies I shall expect to be governed by them in carrying them out both loyally and cheerfully.

Superintendent Is Head

"2. Successful school administration is equally based upon a recognition of the fact that the superintendent of schools is their administrative head, responsible for the carrying out of all the purely educational policies of the board. A corollary of this proposition requires that the principals, supervisors, assistants and other heads of departments shall be responsible to the superintendent and make reports to the board through the superintendent. Any other policy results in decentralization and in the weakening of a system of schools. It further requires that all nominations for supervisory and instructional positions upon the educational staff shall be made by the superintendent upon the basis of merit. Knowing your individual and collective desire to give the schools the best possible administration and management, I trust you will make it possible for me to select and recommend for appointment the best candidates for every position that is to be filled without having to be influenced by any of the extraneous and secondary considerations that are sometimes given first place in determining appointments in some cities.

"3. More and more have democratic principles come to find a large place in the management of schools. Believing in the principles of democracy, I shall aim to utilize to the maximum the advice, the suggestions and the experience of teachers, principals, supervisors and others sharing with me administrative responsi-

bility in improving our course of study, our methods of instruction and our general management of the schools. Indeed, suggestions and ideas which may possibly result in an improvement of some aspect of our public school system are invited and will be welcomed whether coming from other members of the staff or from parents, citizens and taxpayers.

"4. While all schools that are successfully administered invite the fullest measure of initiative and the largest possible opportunity for self-expression on the part of each member of the staff, it is no less demanded in such schools that the principles of loyalty be recognized and acted upon. There is a place for free expression of one's judgment, but there is not less a place for loyal cooperation in carrying out policies deemed best for the schools by those who are responsible for their administration.

Loyalty Is Necessary

"5. Good schools cannot be built up and maintained except as all who have to do with them exhibit the qualities of sincerity, frankness and honesty in their mutual relations. There can be no place for equivocation, duplicity, ambiguity and double dealing. Every child, every teacher, every principal or supervisor ought to feel that he is getting a fair deal. Other learned professions have long had their code of ethics. It is a sign of promise that the teachers themselves in local, state and national organizations are giving increasing attention to the development of such codes for the regulation of their conduct. Whatever others may expect, therefore, I shall count myself a failure unless most that I do and say tends to make it easier to develop a high sense of personal honor and ethical attitude in all of our mutual relationships within the classroom, between the staff and the office and between the office and the public.

"I quite realize that it will not be easy to live and act always in the light of the foregoing principles but I am confident the schools will prosper just to the degree to which our work, whether instructional, supervisory or administrative, embodies these principles from day to day."

AMONG SUPERINTENDENTS

—A. G. C. Smith, superintendent of Delaware County, Pa., has been asked to retire owing to the fact that he has reached the age of 70 years. In a recent number of the *School Board Journal* it was stated that he had refused to resign. This statement is correct, but information has since been received that Mr. Smith is still in vigorous health and that his present term does not expire for another two years. The state law, however, requires retirement at 70 years. A friendly suit has been instituted to test out the equities of the case.

—A. P. Cope, superintendent of the Ashleyboro schools, near Wilkes-Barre, Pa., has tendered his resignation to take effect August 1, 1925.

—R. J. Cunningham, who served as superintendent of the Bozeman, Montana, schools for twenty years has been chosen secretary for the Montana Education Association. He will make his headquarters at Helena. Mr. Cunningham has been succeeded at Bozeman by D. S. Williams of Glasgow.

—U. J. Hoffman, state superintendent of Illinois rural schools, has issued a program of work for one-room schools. "Under the old system," Mr. Hoffman explains, "the teacher was not able to supply the individual needs of the students, with the result that the dull become discouraged and turn to mischief, where they are soon joined by the bright pupils, bored by the average work of the class. Too much time is spent in recitation which informs the teacher whether the pupil has studied, rather than informing the pupil. No time is provided for the proper attention to individual difficulties. By reducing the number of subjects taught each day, and lengthening the period devoted to each subject, the teacher is able to keep in closer touch with the pupil, learning from his questions whether he has studied."

—P. L. Harned, commissioner of education for Tennessee urges higher standards for county superintendents. "The state will pay nothing on the salary of any superintendent receiving less than \$500 per year," he said. "It will pay one-half of any salary voted between \$500 and \$1,000 and encourages counties to pay even more than that in order to secure efficient superintendents."

There is a Standard for Judging Cafeteria Equipment!

AFTER ALL, the true test of any product—particularly school cafeteria equipment—is in actual service. Materials and specifications are important, but most important of all is: How does the equipment withstand the rigors of constant daily use? We urge you to apply this test to PIX Equipment. You will find, we know, that it is more widely used and approved than equipment any other type or manufacture. It is to be found in schools of every size and type—whether the appropriation was modest or extensive—and its performance in every case has proved its durability, efficiency and lasting economy. There is, in fact, no substitute for PIX Equipment. Educators everywhere recognize that it is justly the standard of the world.

A Few of the Many Schools in Which Albert Pick & Company Have Installed Cafeterias

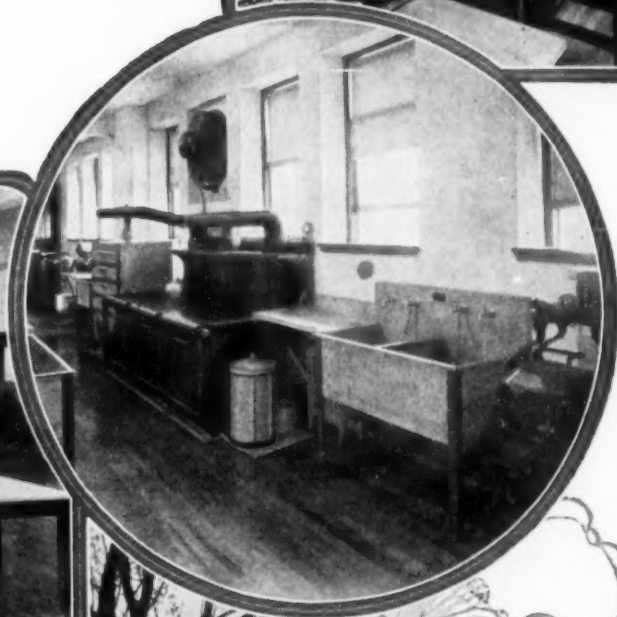
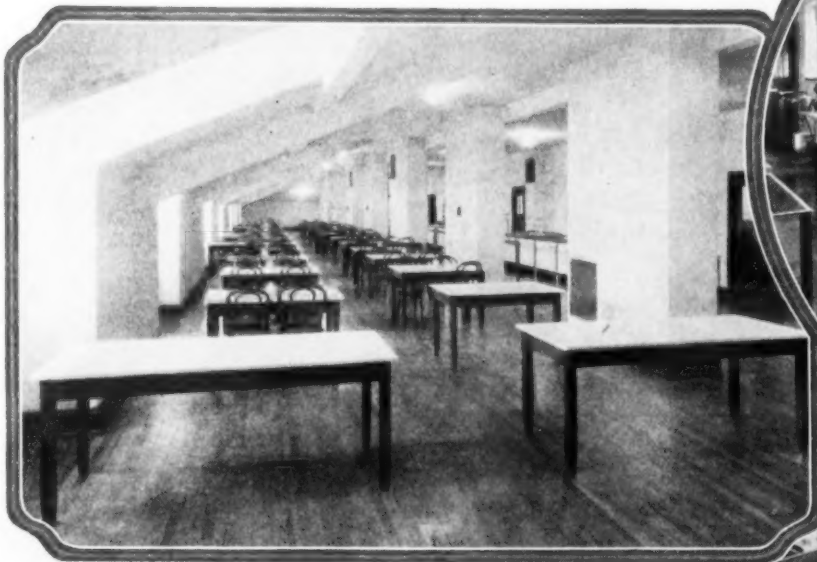
North Side High School, Memphis, Tenn.
Boltwood School Evanston, Ill.
New High School Ambler, Penn.
Barberton High School . . . Barberton, Ohio
Flint High School Flint, Mich.
Senior High School Dubuque, Ia.
Sheboygan High School . . Sheboygan, Wis.
Middletown High School, Middletown, Ohio
Triadelphia High School, Elm Grove, W. Va.
Mo. State Normal School, Warrensburg, Mo.
Columbia High School . . . Columbia, S. C.
Junior High School Beaumont, Tex.
Albion College Albion, Mich.
Gastonia High School Gastonia, N. C.

Below is shown the efficient Domestic Science Department provided by Albert Pick & Company for the Alvernia High School. PIX Domestic Science Equipment is of the same high standard as other PIX Products.

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Chicago, Illinois
Brust & Phillips, Architects

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SCHOOL ADMINISTRATION NOTES

A STUDY OF ATTENDANCE IN NEW YORK CITY

—Supt. W. J. O'Shea of New York City has issued a report giving a summary tabulation of the reports of the several schools on register, attendance, and part-time based on register, part-time based on attendance, and the number of pupils on full-time regular session and full-time special session for all-day schools, together with a comparison of the condition of the schools in September, 1923, and June, 1924.

A study of the tabulation shows that the total register of all the day schools in September, 1924, was 979,462, of which 852,381 were in elementary and junior high schools, 120,085 were in high schools, 2,521 were in training schools for teachers, and 4,675 were in vocational schools. The attendance in all schools at that time was 907,226, of which 796,541 were in the elementary and junior high schools, 104,493 were in senior high schools, 2,239 were in training schools for teachers and 3,953 were in vocational schools. This was an increase of 21,086 in register and of 22,191 in attendance over the register and attendance, respectively, of September, 1923.

The total increase in register for the elementary schools since September, 1923, was 10,643. In the Borough of Manhattan, there was a decrease of 11,217 in the register of elementary schools. In all other boroughs, there were increases in elementary schools, the largest increase being in the Borough of Queens, in which the increase in register over September, 1923, was 8,884. The increase in Brooklyn was 7,967, in the Bronx, 4,345, and in Richmond, 664.

The total increase in register of the high schools since September, 1923, was 9,761. Every borough showed an increase in high school register. The largest increase in register was in the Borough of Brooklyn, which showed an increase of 3,826. In Manhattan, the increase was 2,536; in the Bronx, 1,692; in Queens, 1,404, and in Richmond, 303.

The report showed a gratifying reduction in the number of pupils on part-time, compared with the situation in September, 1923. In the elementary schools there were 67,940 pupils on part-time based on the register, and 63,763 pupils on part-time based on attendance. This was a decrease of 30,262 in the number of pupils on part-time in elementary schools based on the register of September, 1924, compared with that of September, 1923. In the high school there were 27,428 pupils on part-time based on the register, and 23,936 pupils on part-time based on attendance. This was a reduction of 31,648 pupils on part-time based on the register of September, 1924, in comparison with that of September, 1923. Thus, the total number of pupils on part-time based on the register was 95,368, and the total number on part-time based on attendance was 87,699. This was a reduction in part-time of 61,910 pupils based on the register, in comparison with that of September, 1923. The number of new sittings completed during the last year has been sufficient to take care of the annual increase amounting to 21,086, as well as to bring about a reduction of 61,910 in the number of children on part-time based on the register. The greatest reduction in part-time pupils was in the Borough of Brooklyn, in which the reduction amounted to 38,957, of which 21,357 was in the elementary schools and 17,600 in the high schools.

COMPULSORY ATTENDANCE LAWS

All of the 48 states now require attendance at school. Of these, 32 states require attendance to the age of 16, and seven others fix ages higher than 16 as the upper limit. Thus reports the United States Bureau of Education.

The prevailing lower age limit is 7; for 27 States name this as the age for beginning required attendance. In two States 6 is the lower limit. Clearly the present standard in America is that children between the ages of 7 and 16 must go to school.

The attendance required each year is an important element in a compulsory education law. Exactly three-fourths of the States require

attendance for the full public-school term. In only two cases is the minimum requirement less than 100 days annually.

Of the 32 States requiring attendance to the age of 16 under certain conditions a number make the requirement absolute up to 14, but attendance between that age and 16 is contingent upon educational attainment. The standard which would seem to be taking definite form here is this: That the child must attend school until the age of 16 is reached, unless, being over 14, he has finished the elementary grades, has obtained an employment certificate, and has gone to work.

Exemptions from the operation of attendance laws are very similar in the different States. The exemptions of most frequent occurrence are: (1) A child attending an approved private or parochial school; (2) the physically or mentally incapacitated, usually as shown by a physician's certificate; (3) a child residing more than a specified distance, as for example, two and one-half miles from school, unless transportation is furnished; (4) one over 14 whose services are needed for the support of a dependent parent or parents. The tendency is toward reduction of the number of exempt classes. The provision of public conveyance for school children tends to take care of the child living at a distance from school, and widows' pensions are reducing dependence upon child labor. Exemption for the purpose of farm work is fast disappearing from attendance laws. A brief temporary exemption for the purpose of religious instruction is found in the laws of a few States, as Illinois, Iowa, Michigan, Minnesota, and South Dakota.

On the whole, compulsory attendance at school has gained much ground in recent years. Age limits have been extended, the required annual attendance has been increased, educational requirements have been raised, the number of classes of exempted children has been reduced, and the means and methods of enforcement have been appreciably improved.

ADMINISTRATION NOTES

—The school board of Detroit, Mich., has approved the recommendation of Supt. Frank Cody providing for the establishment of a library in the Scripps School in accordance with the provisions of the Scripps fund.

Under the will of the late James E. Scripps, a special collection of books, to be known as the Scripps collection, is to be purchased from the fund and housed in the library under the care of a librarian. The interest on the fund is to be used in keeping the collection in good condition, and in adding new volumes from time to time.

The book collection is to be selected as a basis for study of the normal reading interests of children in elementary schools and the library is to serve as a means of developing the reading interests of children.

—Special legal provision for the education of crippled children has been made in fifteen states of the union, according to information recently compiled by the Bureau of Education at Washington. Seven of these states have established state schools, and six states have provided state aid for the establishment of special classes. In Vermont, special instruction is provided for these children in their homes, and in Oregon, it is provided that one or more children may provide for their instruction in a manner suitable for advancing their general education.

—Chicago, Ill. Dismissal of classes for principals' and similar faculty meetings has been prohibited in a bulletin issued by Supt. William McAndrew. It is pointed out that other school systems do not find it necessary to hold such sessions in school hours, and that parents complain of irregular dismissals. In New York, Mr. McAndrew pointed out, voluntary faculty meetings are held after school hours, and the results of such meetings are posted on the bulletin boards for the benefit of absentees.

—Eugene, Ore. The school board has ruled that all members of secret societies must sign agreements discontinuing their memberships in the societies. The agreement provides that they shall not substitute an equivalent to membership and that they shall not wear pins, colors or badges of these societies. The new rule follows a decision of the board abolishing secret societies in the high school.

—Long Beach, Calif. Under authority given by a state law, the school board has ruled that parents of high school students shall make affidavit that their sons or daughters are not members of a secret society. Failure to do so means the expulsion of the student from the school.

—Half-day sessions will probably not be necessary this year in Indianapolis due to the number of new buildings and additions constructed. In past years it has been necessary to hold two sessions of school daily, especially in some of the graded schools.

—The Kentucky state board of education has added additional qualifications to the five required by law for county superintendents. Under the rules, a legal certificate must be possessed by the applicant and this certificate includes state diplomas issued prior to 1924; certificates on credentials to junior college graduates, or equivalent certificates issued by the state board of examiners on special examination, or any other certificate declared legal by the courts.

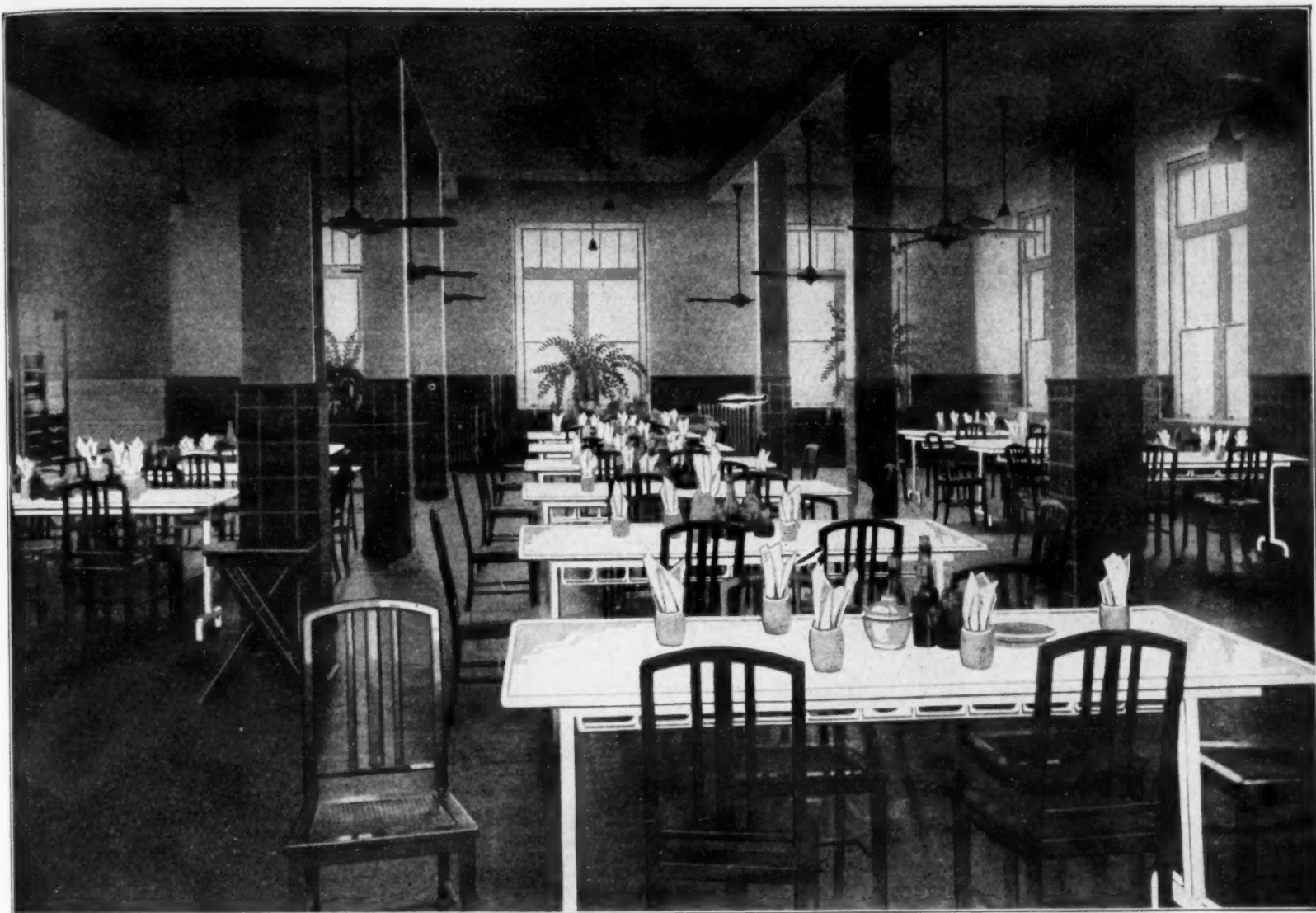
In addition to professional and scholastic requirements, applicants must have legal certificates permitting the holder to supervise the schools of the county.

—Members of the state textbook commission of Oregon will meet in November when changes will be made in one-third of the textbooks in use

(Concluded on Page 95)



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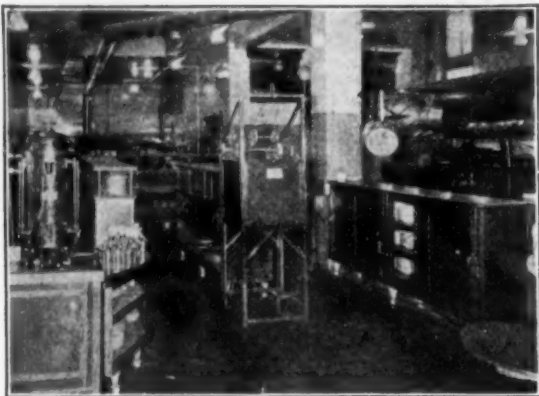
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"In answer to your kind inquiry of January 28th, we are enclosing herewith photograph of our Kitchen. Unfortunately our battery of five Vulcan ranges cannot be clearly seen, but they are very much in evidence.

"Our Chef regards the Vulcan as an excellent range which gives wonderful service with a small consumption of gas.

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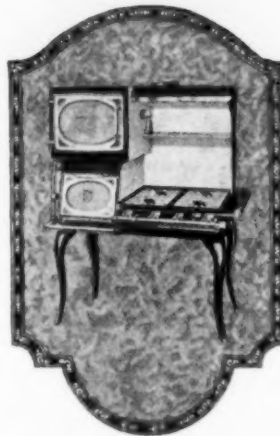
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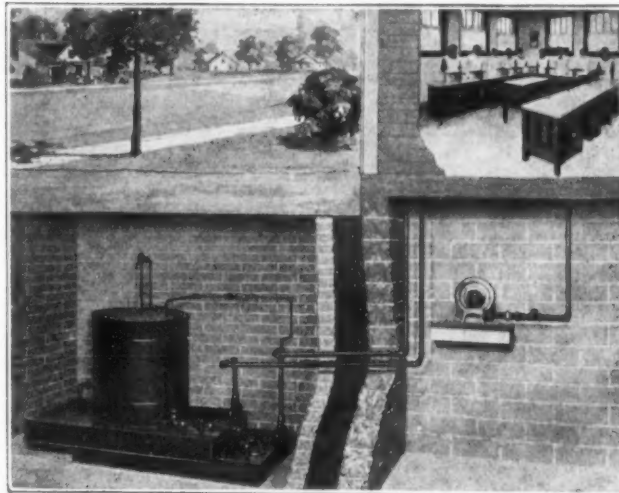
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BUFFALO
ATLANTA
DETROIT
PITTSBURGH

(Concluded from Page 92)

in the schools of the state. The books selected at that time will be placed in use next year.

—Greensburg, Pa. By unanimous vote of the board, fraternities have been prohibited in the high school. It was well known that three such societies were in existence in the high school.

—The board of education of Elmsford, four miles from White Plains, in Westchester County, N. Y., is torn by dissension over the question of whether the principal of the school, H. L. Holden, shall be permitted to punish pupils with a rubber hose. At a meeting held on September 26th, the board ordered that corporal punishment be abandoned.

The principal has told the board that he will resign if not permitted to enforce discipline in his own way, and sixteen of the 22 teachers have threatened to resign if Mr. Holden leaves.

It appears that the trouble arose when half a dozen boys and girls were whipped with the hose without complaint being made, but an agitation started when the principal punished a colored girl for being tardy. The girl's mother went to the school and attempted to settle with the principal so that he was forced to put her out of the building. Holden holds that his method of punishment is suitable since it is illegal to strike a child with anything capable of leaving a mark or a bruise.

—Marysville, O. The probationary promotion plan has been inaugurated in the schools with the opening of the new school term. A number of pupils who failed last spring have been advanced to a higher grade this fall on a probation period of six weeks. Those pupils who do not become proficient at the end of that period will be transferred to the lower grade.

—Xenia, O. A first-grade preparatory class for school children too young to enter regular classes has been proposed by Supt. C. A. Waltz. The class is intended to prepare children to enter the regular second grade next year.

Under the plan, a room in one of the schools will be furnished for the purpose. The board will supply the light and heat and the parents will pay for the extra teacher.

—The question whether school children shall be graded by means of psychological intelligence tests is being discussed by school authorities at Washington, D. C. Ernest Greenwood, presi-

dent of the board of education is the leading opponent of the tests, while Supt. F. W. Ballou heads the faction favoring the tests.

A year ago Miss Jessie LaSalle was employed as supervising principal of the second division of the schools, with orders to carry out intelligence tests in classifying pupils. Since then more than 10,000 children have been tested and assigned to classes.

In the controversy, Mr. Greenwood contends that it is impossible to arbitrarily decide that a child precocious in the matter of a test can do fifth, sixth or seventh grade work. On the other hand, he holds it unjust to conclude that a child who cannot perform the "tricks" of the test should be consigned to a lower grade. He urges that all pupils go in the logical grade and that they be allowed to sink or swim as the case may be. Supt. Ballou, on the other hand, declares the tests have been conducted one year and that complaints have not been lacking. He declares there might have been more complaints and by that point prove the value and workability of the idea. Upon the final disposition of the matter in Washington will depend the extension of the intelligence tests to other schools.

—New Ulm, Minn. Supt. Arnold Gloor has been asked to formulate rules governing the dress of high school girls. His recommendations are to be presented to the board for approval.

—Sacramento, Calif. Over the protests of two members, the school board has established a class for over-grown and backward children. The plan was suggested by director J. E. Lynn and is to be carried on as an experiment during the present year.

—Rural schools in the prune-growing sections of Clarke County, Washington, delayed opening until September 29th because of the prune harvesting season. One school opened but closed down for the harvesting dates, to reopen when the work was completed.

—Newark, N. J. A decrease in school enrollment was experienced for the first time this year. The reported enrollment was 73,926, a net decrease of 214 pupils. Among the reasons attributed for the decrease are the change in district lines, a shifting population and a reduction in immigration. One school, with an en-

rollment of 1,326 pupils, had an increase of 534, while another school had an increase of two hundred pupils. The McKinley School which has the heaviest enrollment and which has made constant gains in number of pupils, has an enrollment of 2,295 students this year, or a decrease of 62 since last September.

The gain in high school enrollment as compared with last September is slight. The total is 7,192, as against last year's total of 7,026. Increased enrollment was reported at two schools and reductions at two other schools.

—St. Joseph, Mo. New standards for promotion in the high and graded schools recommended to the board by Supt. C. A. Greene, were approved on September 8th.

Under the new rules, a high school student with an average of 80 per cent, and with no grades below 75 per cent, and no examination mark below 70 per cent, is exempt from examinations. The department average must be 90 per cent or above.

In the grades, candidates for promotion must have grades of 75 per cent, with no grade below 70, and a general average of 80. A grade of 90 per cent, together with a department mark of 90, exempts the pupil from examinations.

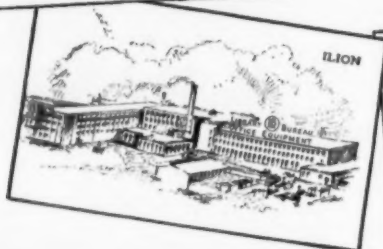
The new plan provides incentives for better work and offers less dependence on final examinations.

—The fall attendance figures set the total attendance in schools of Oklahoma 25,000 in advance of that reached a year ago. The high school attendance showed a gain of 5,000, making the enrollment for this department fully 85,000. A total of 17,000 teachers have been employed, of whom 13,000 are women and 4,000 men.

—Ware, Mass. A new junior high school has just been completed. The board has established two opportunity classes for retarded children.

—The contention was recently made in a Chicago court that children cannot be compelled to attend school where dangerous railroad crossings are encountered. A Kansas supreme court decision was cited in a case where children were forced to cross sixteen dangerous railroad tracks twice a day. The court ruled that the children could not be compelled to attend school.

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School library supplies

Administrative school records and files for superintendents, principals, department heads, secretaries, etc.

*Write for catalogs and
information*

—A special commission has reported that fire drills conducted in the Chicago schools are only fifteen per cent efficient. Superintendent McAndrew has issued a bulletin to the school principals designed to increase the efficiency. Control of the pupils, says Superintendent McAndrew, is to be regarded as more important than speed. Teachers should be able to change the routes of their marching pupils at a moment's notice and without confusion. The children also are not to be allowed merely to march out of the building and then to march back again. They must remain in the school yard until the principal gives the signal for their return to the classrooms. By such means Superintendent McAndrew hopes to assure the safety of the city's charges even in the most perilous emergencies.

—New York, N. Y. Funds raised within schools for school purposes will be limited to 50 cents per child in elementary schools, and \$2 in high schools, if regulations now before the board of superintendents are accepted by that body and later approved by the board of education.

Under the plan, not only the total amount raised will be limited but all entertainments of a commercial nature to raise funds will be barred; funds collected from pupils may be used for decorations, but not for school repair, equipment, or supplies. Expenditures on athletic clubs or legitimate items of public welfare, including scholarships, are to be regarded as proper.

—A change in administration has been made in the high school of Maysville, Ky., this year. Tablet arm chairs have been installed in the auditorium in order that pupils may be assembled there for study. Heretofore each classroom has served the double purpose of recitation and study room. This has made extra work for the teachers and has interfered with classwork. The new plan is considered an improvement over the old system.

—Arabi, La. The St. Bernard Parish school board has adopted a set of rules for the government of the public schools. An auxiliary or helping teacher has been employed to work with backward pupils and to strengthen weak spots in the school work. A motor bus has been provided for transporting the pupils to and from the high schools.

—Falmouth, Mass. Two special classes for subnormal children were opened early in September. New equipment for transporting children was inaugurated in September. The equipment is uniform and consists of seven glass-enclosed motor busses, heated and ventilated.

—Grafton, Mass. The public schools opened for the fall term with a record attendance, all but two schools reporting large increases in enrollment. All classrooms have been occupied and two rooms in one school are on half-time. The enrollment for the present year shows an increase of almost seven per cent over that for last year.

—The Better Schools League is seeking the display of the American flag in every schoolhouse in the land. In most states the display of the flag is obligatory upon the school authorities. In the states of Colorado, Georgia, Kentucky, Louisiana, Missouri, North Carolina, and South Carolina it is not.

—In opposing federal aid and control of the public schools of this country Ernest Greenwood, vice-president of the board of education of the District of Columbia, points to the failure of the Washington schools now under federal control.

—Chicago, Ill. The long fight waged by Supt. William McAndrew to reduce interruption to teaching and to abolish meetings of the teachers' councils during school hours recently resulted in a victory for the superintendent. The board, by a six to three vote, adopted an amendment offered by Supt. McAndrew, providing for the organization of the teachers' organization as he sees fit. The board in outlining its stand, pointed out that in the last two years the council meetings have cost the schools approximately \$300,000 and that only one recommendation of the teachers was adopted by the superintendent.

With the adoption of the amendment, the councils as constituted pass out of existence, and the superintendent is given authority to undertake their reorganization in line with his own ideas. It is probable that the teachers will be given the use of the school buildings after dismissal of classes for their meetings.

—Supt. William McAndrew of Chicago has taken steps to limit the number of school drives

and school weeks to be observed in the schools. Mr. McAndrew believes in all these special days but holds that the children need more time for the study of common subjects. The drives or movements which have been approved are:

Red Cross roll call.
Christmas cheer to hospitals.
Washington's birthday celebration.
Cleanup week.
Near-East relief.
Boy Scouts and Girl Scouts.

—St. Louis, Mo. According to a rule of the St. Louis board of education, the month of March of each year is set aside for the Supply Commissioner to prepare and submit to the board a complete schedule of the supplies which, in his judgment and the experience of the board, will be required during the ensuing year, together with estimated quantities and costs thereof. Upon the adoption of such schedule by the board, the Supply Commissioner must cause advertisements to be made for proposals for furnishing such supplies, these advertisements to be published in a city newspaper having a daily circulation of not less than 25,000.

The public schools of Indiana, on October 7th observed the birthday of James Whitcomb Riley in connection with the opening of the new Riley Memorial Hospital, which received its first child patients on that date. The institution provides free treatment for crippled and undernourished children and is capable of accommodating two thousand patients.

—Newark, N. J. Classes for the conservation of eyesight have been established for the purpose of relieving eyestrain in children and for preventing retardation in cases where the eyesight handicap has hindered advancement. Classrooms for this work are equipped with movable and adjustable desks. Light is admitted from the northeast and walls are tinted a light buff. Blackboards are not used.

—Urbana, O. As a means of eliminating malingering on the part of some pupils, the school board has ordered that the superintendent require that sick pupils present health certificates from the health commissioner. In the past, it has been the policy to excuse sick pupils if they presented a doctor's certificate to the effect they were unable to attend classes.



Northeast High School—Reading, Pa.

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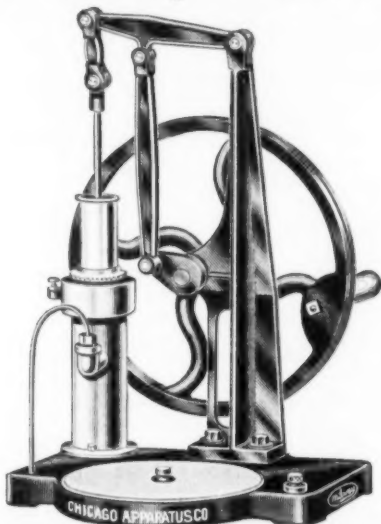


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Second: No oil splashing. This is accomplished by the new type of top cylinder construction.

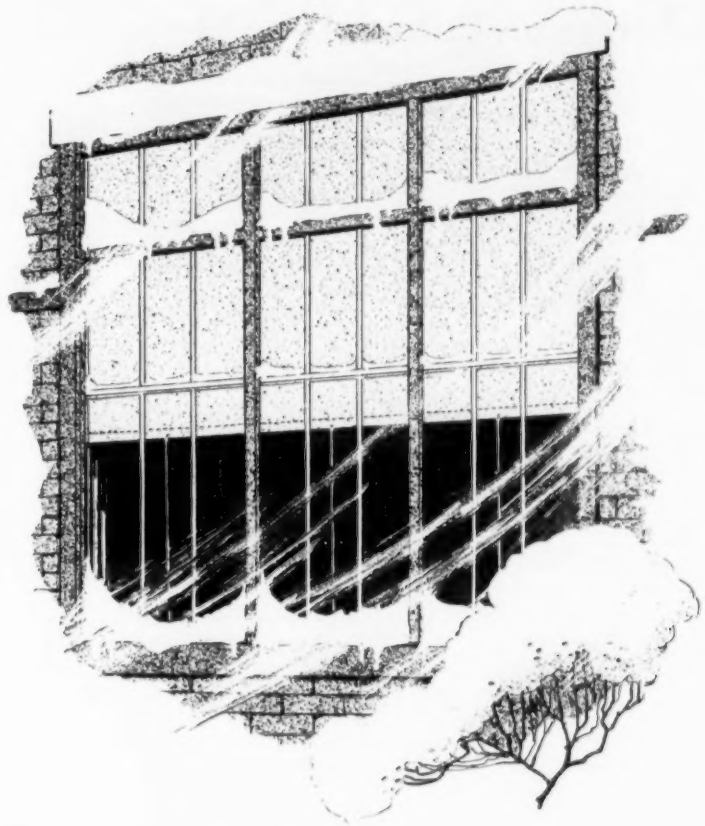
Third: Greater durability. The entire lower section of the cylinder is encased in a single heavy brass casting. There is not a single external joint to leak or open up. No valves. Fits all standard air pump accessories. Can be operated by hand or motor power. Its sturdy construction enables it to withstand the strains of continuous operation. Lifetime service is absolutely assured. Many other desirable features.

This is only one of the many new and improved designs listed in the New Milvay Catalog.

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Milvay Scientific Instruments

701 W. Washington Blvd., Chicago, Illinois



Snow Glare and Wintry Draught!

THE source of strained eyes and frequent colds—what educator has not worried greatly over these drains on the vitality of the pupils, these hindrances to their scholastic progress?

Yet how many of these troubles are simply the result of poor shade equipment that can be easily corrected!

There are shades that permit both proper ventilation and proper distribution of light.

They are of HARTSHORN manufacture, now in use in innumerable towns and cities after thorough tests by exacting school boards. Mounted on Hartshorn Rollers with No. 86 or No. 87 double brackets, shades of Hartshorn Oswego fabric not only last several school terms with any reasonable care, but permit proper regulation of light and heat at all times.

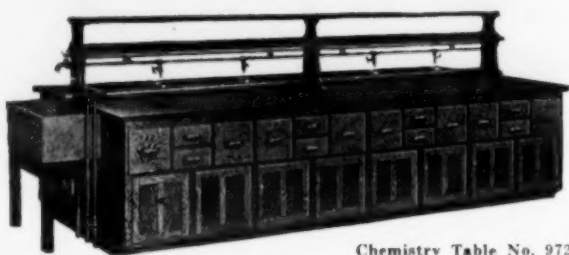
Distributed by converters
throughout the entire country.

Write for colors, sage, linen, putty, dust, dill, and in Tinted Cambric especially adapted for school use. They have been approved by competent chemists.



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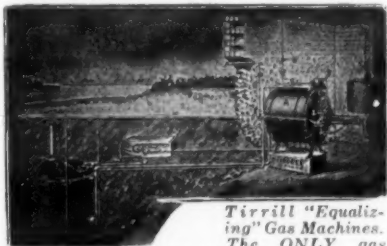
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TIRRILL Gas machines on account of their satisfactory performance and length of service are by far the cheapest investment you can make. Easily installed—made to last.

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are used exclusively in many universities, schools, scientific and industrial laboratories throughout the country because they are always reliable and get best results even in the most delicate and exacting experiments.

In addition to the style shown here our latest circular contains detailed description of our complete line. Write us today for your copy. Also send us your complete gas requirements and we will gladly submit estimates.

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University of North Carolina, Chapel Hill, N. C.
Michigan Agricultural College, Lansing, Mich.
Massachusetts College of Pharmacy, Boston, Mass.
Board of Education, Lincoln, Nebr.
Board of Education, Richmond, Va.
Board of Education, Middletown, Ohio.
New Trier High School, Kenilworth, Ill.
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—in Mt. Clemens, Michigan, High School

This picture tells, better than words, a story of sanitary, healthful surroundings. It tells of a progressive school board, fully aware that antiquated, hand-and-knee scrubbing is out of place in a modern school building.

The Finnell scrubbed floors of this school are *really clean*. The Finnell System doubles and triples the amount of scrubbing a janitor can do, and he does it with less effort. The Finnell way provides clean water for every square inch of floor space.

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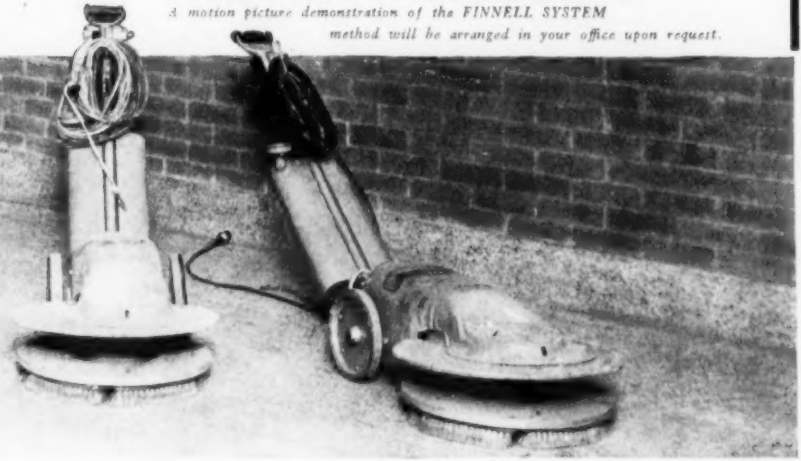
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A motion picture demonstration of the FINNELL SYSTEM
method will be arranged in your office upon request.



PERSONAL NEWS OF SUPERINTENDENTS

—The salary of Supt. James N. Muir of Bethlehem, Pa., has been raised from \$5,350 to \$6,500.

—Supt. F. G. Bittikofer, head of the schools at Marysville, O., successor to W. F. Hoover, has recently reorganized the schools on the junior-senior high school plan. One school has been organized with 66 pupils and another with 56 pupils enrolled.

—The school board of Green Bay, Wis., recently adopted resolutions on the death of the late A. W. Burton, who was superintendent for twenty years. Mr. Burton completed a long period of unselfish devotion, during which he exhibited a never-failing kindness to teachers and children and an intense interest in every movement looking toward increased efficiency in the schools.

—Mr. Clay Gaumer has been elected superintendent of schools at Howard, O.

—Mr. W. A. Bass has been appointed state high school supervisor for Tennessee, succeeding J. W. Brister who resigned to become president of the West Tennessee Normal School. Mr. Bass is a graduate of the University of Tennessee and had been superintendent of schools at Covington for some time.

—Supt. W. A. Holland of Columbus, Tex., died at San Antonio, September 24th, following an illness of two months. Mr. Holland came to Columbus twelve years ago from Hearne where he held a position.

—Dr. John B. Laidlaw has announced his resignation as superintendent of schools at Niagara Falls, N. Y.

—Mr. Worcester Warren, of Duluth, Minn., has been appointed as assistant superintendent

at Bridgeport, Conn. Mr. Warren succeeds J. B. Dougall.

—Dr. William L. Ettinger, former superintendent of the New York City schools, is writing a series of articles for the New York World under the caption of "What's Wrong with our Schools?"

—After an inspection by the state department Superintendent George N. Wood of the St. Louis, Mich., schools was asked to resign. Mr. Wood has refused believing the attitude of the state department has been unfair.

—The selection of J. H. McIver as superintendent of Columbus County, N. C., is highly approved by the press of that section. The board of education consists of Leon Lewis, M. B. McAuley, Joseph Powell, Clyde Gore, and M. Thompson.

—The appointment of D. T. Meisberger as acting superintendent of schools for Coal Township, Pa., to succeed P. Frank Brenna, will be contested in the courts. It is claimed he does not hold a certificate from the state board.

—Dr. John M. Withrow, formerly president of the Cincinnati school board, has been appointed chairman of the citizens' school committee. He succeeds G. W. Mallon, who resigned in order that Dr. Withrow might become the directing head of a campaign to secure a bond issue of \$8,500,000 for schools this fall. The bond issue to carry on the building program for the schools has been given endorsement by the committee.

—H. Brewster Willis, who served Middlesex County, N. J., for thirty-seven years as superintendent, has been reelected for another three years. The Perth-Amboy News says: Few men have ever shown more interest in their work and there is no doubt that Mr. Willis enters upon his new term with as much enthusiasm as when he first took hold. Middlesex is fortunate to have such a man at the head of its educational system."

—Miss Mildred E. English of Nashville, Tenn., has accepted a position as assistant superintendent of schools at Raleigh, N. C. Miss English who was a teacher and principal, came to the Tennessee Education Department to assist in a program for improving the public schools of the state. In her work as assistant secretary, she did much to increase the interest and member-

ship of the state teachers' association. She also acted as editor of the Educational Bulletin issued by the state educational department.

—Supt. E. A. Elliott of Fredonia, Kans., has entered upon his sixth year as head of the city school system.

—Mr. Thomas B. Portwood has been elected superintendent of schools at Atchison, Kans. Mr. Portwood is a graduate of Teachers College, Columbia University.

—Mr. C. O. Smith of Marysville, Kans., succeeds W. O. Steen as superintendent of schools at Beloit. Mr. Steen has entered the employ of the World Book Company as the Kansas representative for the firm.

—Supt. H. P. Smith of Lawrence, Kans., has been given a leave of absence to attend Teachers College at Columbia University. During the absence of Mr. Smith, the administration of the schools will be under the direction of Dr. M. C. Del Manzo, of the State University. Dr. Del Manzo was formerly with the State University of Iowa where he directed the administration of the experimental schools for the University.

—Miss Maude Holman has been appointed to succeed Miss Mildred English as secretary to P. L. Harned, state commissioner of education of Tennessee.

—Mr. C. E. Beach of Enumclaw, Wash., is a candidate for the office of state superintendent of public instruction. Mr. Beach believes that more progressive educational policies are needed in the schools. He promises to make every effort to keep the educational pace up to that of the industrial and commercial activities.

The candidate has had wide teaching experience in Washington, covering a period of 28 years. He was superintendent at Olympia eleven years, at Bremerton three years, and is now superintendent at Enumclaw.

—Mr. R. C. Bowen of Battle Creek, Mich., has been elected superintendent of schools at St. Louis.

—Mr. A. W. Glad, principal of the high school at Paola, Kans., has been made a member of the faculty at Lindsborg College.

—Miss Lottie Stockwell tendered her resignation to the board on June first. At that time she completed 35 years of faithful, efficient service to the schools of Paola.



ELECTRIC TIME and PROGRAM CLOCK SYSTEMS

The cut shows a recent Landis installation in the new High School, Skaneateles, N. Y., apparatus installed being as follows:

- 1—Master Clock;
- 1—Program Machine, one-minute interval type;
- 12—2½" Classroom Bells;
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- 10—Secondary Clocks;
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NEW HIGH SCHOOL, SKANEATELES, N. Y.

LANDIS ENGINEERING & MFG. CO.

423 Board of Trade Bldg.,
INDIANAPOLIS, IND.

Waynesboro, Pa.

—Mr. James W. Frost of Avon, Mass., has been elected superintendent of schools at Colchester, Conn.

—Mr. W. E. Baker of Englewood, Colo., has been elected superintendent of schools at Fort Morgan. Mr. Baker is succeeded by Mr. G. Gordon, formerly principal of the high school at Englewood.

—Mr. R. G. Sanford of Knoxville, Tenn., has been elected superintendent of schools at Covington, to succeed W. A. Bass, who has become state high school inspector.

—Mr. Alvin C. Kibbey, acting superintendent of schools at Shelbyville, Ind., has been elected as superintendent to succeed the late J. W. Holton.

—Mr. Clarence Orr, formerly principal of the Villa Grove Township High School in Illinois, has been elected superintendent of schools at Venice. He succeeds S. J. McComis.

—Supt. A. R. Tiffany of Cresco, Ia., on July first, completed his third year as head of the public schools. During his incumbency, the business department has been reorganized, the salaries of teachers have been raised, and the course of study enlarged.

—Supt. A. F. Cook of Hinsdale, Ill., has been reelected at a salary of \$6,000. Mr. John Graurud has been elected assistant superintendent at a salary of \$4,500.

—R. G. Smith of Rushville was elected president of the western division of the Illinois Teachers' Association. A. L. Bealle, Henderson County superintendent of schools, was elected vice-president; Miss Myrtle Simmons, Monmouth, secretary, and A. E. Decker, Carthage, treasurer. R. W. Hyndman, Canton, was named chairman of the executive committee.

—Prof. S. H. Buntley, of Sheldon, Ia., was recently elected as president of the Northwestern Iowa high school music activities' association. Prof. Buntley has had charge of the musical work in the Sheldon schools for the past 22 years. For the past three years he won the state championship in mixed chorus work, boys' and girls' glee clubs.

—Oklahoma: H. L. Tripp of Flercher goes to Sterling as superintendent; Superintendent G.

S. Dowell will teach vocational classes at Tecumseh high school; C. C. Sample will resume superintendency duties at Custer City; E. C. Cunningham succeeds E. R. Bell as superintendent at Alluwe; J. C. Reed of Dear Creek goes to Willow; J. W. Rackley goes to Mangum; T. G. Napier goes to Tishomingo; T. M. Beaird goes to Kiefer.

—The election of Fort E. Land to the state superintendency of Georgia elevates an educator who made his record in the vocational field. He served for four years as state vocational director. His home is at Macon.

—Mr. Thomas S. Grindle, of Westboro, Mass., has been elected superintendent of schools at Lexington. He succeeds H. H. Lowry, who has accepted a position in Waltham.

ADMINISTRATION NOTES.

—Chicago. A recent opinion of the school board's assistant counsel, Ralph Condee, to the effect that there exists no authority for the physical examination of school children has brought on a controversy. Upon receipt of the opinion, Supt. William McAndrew promptly ordered that physical examinations of pupils, other than inspections for contagious disease, be discontinued. This ban has the effect of stopping inspections of children for evidences of physical defects which retard their ability to learn and prevent healthy growth. It also dispenses with the heart and lung examinations which had been planned as extensions of the work this year.

Following the order of Supt. McAndrew, Mayor Dever and Commissioner of Health Bundesen took their stand against the order. The mayor in commenting on the matter declared that "it is difficult to conceive of a more important work than the physical examination of school children. It is most essential that parents and teachers be advised as to the improvement of the physical condition of children. The work itself, and the benefits derived from it are so important, the health department, instead of abandoning it, should expand the work."

Dr. Bundesen produced records of the board of education, showing that in January, 1908, an

order was passed giving the city health department the right to conduct examinations of children in all schools. Dr. Bundesen showed that it costs the city \$250,000 a year for the reeducation of laggards in the schools. These children are not laggards because they are stupid; but, because they have a physical defect which is remediable. The doctor does not treat the child but simply discovers the ailment and advises treatment by the family physician.

Dr. Portis declared that "every civilized community looks after the health of its people. For the board to allow discontinuance of these examinations is to go back one hundred years. One-third of the Class A men rejected during the war were refused because of defects easily corrected when they were children."

—Appleton, Wis. The school board has been asked to approve a plan for operating the city school system on the union school basis. The plan involves the assignment of a city superintendent in charge of all grades; an assistant superintendent in charge of grades from the first to the sixth; a high school principal, and principals for the junior high schools.

—More than one million children are in attendance in graded schools in Illinois every day of the year, according to a recent report of the state superintendent. Of 1,299,472 children enrolled in schools last year, 657,800 were boys and 641,700 were girls. The daily attendance averaged 1,087,800 and the attendance averaged 83 per cent throughout the year. Schools were in session an average of 185 days during the year, and each pupil attended an average of 153 days. The average cost per pupil, for all expense, during the year was \$87.31. The per capita cost of high school pupils for current expense was \$114.27, and the per capita cost for grade pupils was \$72.14. A total of 146 new buildings were built and a total of \$9,870,990 was spent on high school grounds, building and equipment.

The report placed the number of publicly owned schools at 13,956, which, with 325 rented buildings, makes a total of 14,281 buildings used for school purposes. The total value of all school property is estimated at \$241,978,744.



High School-Whitehall, Ill.
Equipped with 17 UNIVENTS
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Building Human Lives

Our schools are the most important factor in the world. There we are building the nation of tomorrow.

The superintendent of your school is your production manager. He or she is directly responsible to you for the quality of the product. Therefore, the superintendent is entitled to the best equipment possible. Short-sighted economies should not handicap him or her.

Only the best lighting, sanitation and ventilation will make it possible to produce the highest type of men and women physically and mentally.

For this reason, when planning a new building or remodeling an old one, investigate Univent Ventilation. It is fresh air from outdoors heated and distributed directly in each room without draft.

The latest edition of "Univent Ventilation" will be mailed on request. Know the facts it contains before you commit yourself to any heating or ventilating system.

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NONGO No. 4388-N, vitreous china pedestal fountain with self closing valve, concealed pressure regulator and china bubbler. Provided with sanitary bubbler, as well as a spout, for filling glasses.

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Sanitation is one of the most predominating factors in the selection and purchase of plumbing fixtures.

NONGO Plumbing Fixtures are not only scientifically designed to insure absolute sanitation but are also durably constructed, of selected materials, and combine mechanical perfection with beauty in appearance. Their installation is a positive assurance of absolute satisfaction and years of efficient and uninterrupted service.

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PROMOTE
BOTH
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WASHFOUNTAINS

A FEW RECENT
INSTALLATIONS.
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Tilden High School,
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Shorewood Grade School,
Continuation School,
Milwaukee, Wis.
Fortuna Grade School,
Fortuna, Calif.
Theodore Junior and Senior
High School,
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High School,
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Woodland Union High School,
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Bradley Washfountains represent a great advance in modern washroom equipment. They promote both cleanliness and sanitation, are self cleaning and require but a minimum of janitor service.

And Bradley Washfountains are most economical. Their use reduces the number of fixtures required. They save floor space, use less water, and permit the use of fresh tempered water at all times.

For use in Schools, Colleges and Universities and in every type of public lavatories, there is no fixture equal to the Bradley Washfountain in utility, durability and beauty and in economy of operation and maintenance. "The first cost is the last cost."

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BRADLEY WASHFOUNTAIN CO.
MILWAUKEE, WISCONSIN



The New Model Puro Liberty Drinking Fountain
Represents the Greatest Advance Made in
Drinking Fountain Construction.

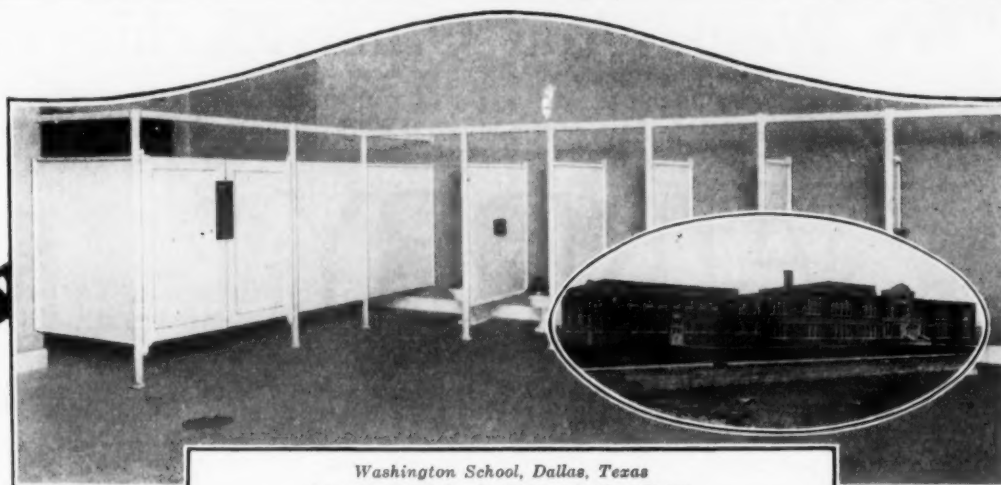
This Fountain Was Designed Especially for Use
in Schools.

All Puro Fountains are made of solid bronze cast metal from heavily designed patterns. No breakage possible. Nothing to crack, chip or become unsightly. An installation once made will last a lifetime. Puro Fountains are highly finished, and heavily nickel plated. They are always clean and inviting and do not require the continual care of enameled goods.

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Washington School, Dallas, Texas
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Another fine new school building equipped with

SANITATION, economy and long life are primary considerations in every modern structure. Because of WEISTEEL'S ability to meet the most exacting of these requirements, it is being specified more than other equipment for like purposes.

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DRESS REGULATIONS ADOPTED AT LITTLE ROCK

The following regulations have been announced by the school officials of Little Rock, Arkansas. They seem to disprove the old saying, "You can't regulate folks into righteousness."

1. No rouge or lipsticks.
2. A simple arrangement of the hair recommended.
3. No French heels, satin or dress slippers.
4. No silk hose.
5. No bare knees among high school pupils.
6. Middies or plain waists worn with woolen or cotton skirts, or simple woolen, cotton or linen dresses.

The reasons given for the adoption of the resolutions are that. 1. Health may be promoted. 2. Modesty inculcated. 3. Expense to parents reduced. 4. Scholarship rather than fashion emphasized. 5. A democratic spirit fostered, avoiding distinctions due to dress.

HIGH SCHOOL ADMINISTRATION

—Cincinnati, O. High school principals have recently reported to the administrative department that all students holding memberships in a fraternity or sorority last year have presented written resignations from the same. On September 5th, at the order of Supt. R. J. Condon, students retaining memberships in these societies were ordered suspended.

—A high school at Memphis, Tenn., has excluded from attendance two students, a girl 18 and a boy 19, who have become married. R. L. Jones, superintendent of the city schools, and the principal, both admitted that they know no law that would prevent the young wife from return-

ing to school, if she saw fit to press the point, but agreed that the action was final.

—Dubuque, Ia. A committee from the local rotary club called on every student enrolled in the senior high school who failed to return to school the first week of September. As a result of the committee's excellent work, a number of the students have been brought back to the school.

A committee from the public school league worked out an arrangement, whereby boys and girls who must work their way through school, are given places where they may work short hours. The plan has been of considerable assistance to students anxious to obtain a high school education.

—A high school student of Spokane, Washington, named Denton McBean, was enrolled at the autumn opening of schools. When it was discovered that he was married his name was dropped from the roll. Thereupon his father instituted mandamus proceedings against the board of education compelling that body to show cause why the student should be removed from the schools. Orville C. Pratt, the superintendent, states that McBean is not the first boy to come under the board's ruling.

—At La Crosse, Wisconsin, the board of education has requested the cooperation of parents in suppressing high school fraternities. The Tribune of the city says: "It would have been more spectacular to thunder an interdict and swing the axe out of hand, but it would quite probably have aroused a defensive reaction not only among the students affected, but with their parents. The school authorities know, and others who have had the opportunity to investigate know, that experience everywhere has shown that high school fraternities are a positive evil usually, and valueless always. But it is apparent that a great many parents are not fully aware of these facts—if they are, certainly they would not permit their children to accept membership."

—The question of the advisability of proposed establishment of high schools by small communities which in the past have been accommodated by adjoining larger municipalities and approval of them prior to their construction was pre-

sented to the New Jersey state board of education by Commissioner John Enright. These municipalities, Mr. Enright stated, desired that approval be given to their proposed action prior to actual construction. Multiplication of high schools, said the commissioner, should not be encouraged, although, on the other hand, there should be no disposition to discourage those places or districts which are now providing adequate accommodations. The fundamental thing is that the state board has control over the making of regional high school districts and also has authority to protect those which have provided proper accommodations.

—Cheneyville, Va. A building for high school purposes has recently been completed at a cost of \$50,000. The site comprises three acres of ground affording space for an athletic field.

—Lecompte, La. A building for high school and elementary grades, costing \$165,000, is under construction in the city. The building occupies a site of two blocks and an athletic field is located near the building.

—Swampscott, Mass. The town has taken steps toward building an addition to the Hadley School, which houses the junior high school and elementary pupils. It is planned that the elementary pupils shall be placed in the addition, leaving the old building entirely free for junior high school use.

—The new Bogota, N. J., high school was opened with President Normal L. Wills presiding. Dr. Lambert L. Jackson, assistant state commissioner, B. C. Wooster, county superintendent, and Frank E. Tilton, supervising principal.

—The new Fruit high school at Providence, R. I., was dedicated with a suitable program. John Glenn, chairman of the building committee, presented the keys. The acceptance address was made by Dr. Joseph E. Farnum, chairman of the school committee. The formal address was delivered by Emerson L. Adams, assistant commissioner of education.

—The new Guide Star school at Dexter, Mo., was dedicated with speech and song. J. A. Boone, the first president of the board, was among the speakers. The present members, President Ben Kruse, Secretary J. C. Dugan, and Oscar Norman, also participated in the exercises.

"We Would Add Other Machines—"

"We would add other machines were we to expand our buildings still further." So say Palo Alto, California, school officials—and so say school board and school administration officials all over the country of



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THE "ELECTRIC TOWEL"

This new, economical, and sanitary equipment for school lavatories has been greeted with enthusiasm by school officials everywhere.

Instead of the usual disorderly, littered, unsanitary school lavatory—and a neat and sanitary lavatory is always the greater problem where there are school children—imagine a lavatory absolutely clean and neat in every detail, ready for inspection at all times.

School children are fascinated by the cleverness of the device and find it delightful to use. Just a touch of the foot on the pedal—the warm air rushes out—and the hands and face are dried Nature's way—by evaporation.

The saving is almost unbelievable! Once the machines are installed, there is a saving of from 60 to 85 per cent over towels—and continuous service all the time. Both important points in schools, for school children use towels extravagantly.

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AIRDRY—The ideal equipment for lavatories!



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TEACHING STATUS IN NORTH CAROLINA

Of 13,120, white teachers, with standard certificates, employed last year in North Carolina schools, 2,330 or 17.75 per cent had taught for the first time, and of these, 1,927 or 82.7 per cent taught in rural schools and 403 or 17.3 per cent in city schools.

Of 9,504 white teachers, with standard certificates, employed last year in the rural schools, 1,927 or 20.17 per cent had taught for the first time. Of 3,576 white teachers with certificates, employed last year in city schools, 403 or 11.26 per cent taught for the first time.

Teachers in the state's rural schools have two and one-third years' less scholastic training than teachers in the 24 large city systems. The average training of teachers in all cities of the state is one-fifth of a year less than the average in the 24 largest cities.

The state reports a steady yearly increase in the number of both white and colored city and rural teachers in the last twenty years. The number of school teachers, white and colored, rural and city, increased 126 per cent in the last twenty years and 62 per cent in the last ten years, or an average yearly increase of 6.2 per cent in the last ten-year period and 6.3 per cent in the twenty-year period.

The number of city white teachers increased 477 per cent in the last twenty years and 123 per cent in the last ten years, or an average yearly increase of 23.5 per cent for the twenty-year period and 12.3 for the ten-year period.

The number of rural white teachers increased 102 per cent in the last twenty years and 49 per cent in the last ten years, an average yearly increase of 5.2 per cent for the twenty-year period and 4.9 per cent in the ten-year period.

—The Chicago school system was thrown into another turmoil when Superintendent William McAndrew recommended that the teachers' council meetings be held outside of the regular school hours. The custom had grown up to hold them within the regular school hour thus closing the schools while the councils were in session.

The board of education discovered that these invasions into the school time had cost the system something like \$360,000 annually and that under the circumstances this cost was not warranted.

The members of the board of education including President C. M. Moderwell, Vice-President Edgar N. Greenbaum, William K. Fellows, Johanna Gregg, Hart Hanson, and Julius F. Smietanka issued a public statement in which they urged the following:

"The superintendent of schools receiving from principals, teachers, parents and citizens protests against interruptions of regular school service declined early last term, as was his right and duty, to authorize curtailment of the teaching periods. As is not unnatural there were reasons for and against such curtailment.

"After having listened to various arguments the undersigned have come to the conclusion that the dismissal of classes for the councils is contrary to the best interest of the school service. We oppose dismissal of classes because we believe that the city is entitled to full, regular, uninterrupted attention to instruction of its children. Furthermore, we have found no instance in other cities where schools have been dismissed for the purpose of holding teachers' councils.

"We recognize as one of the chief functions of the Board of Education careful supervision of the expenditure of public funds and the strictest fidelity to a program for the prevention of waste. In 1914 the total school budget was approximately seventeen million dollars per annum; for 1924 the total school budget is in excess of fifty-nine million dollars; and yet it has become almost impossible to provide the children of the city with proper housing and instruction. A longer and not a shorter period of service seems imperative.

"The report of the recommendations made by the teachers' councils, during the past two years,

to the superintendent shows only one proposal by the councils which has been adopted by the superintendent. To operate these councils for the past two years has, according to the auditor, cost the citizens of Chicago approximately three hundred and thirty thousand dollars, which seems an exorbitant sum to pay for the benefits received.

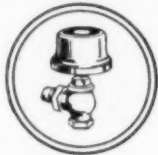
"We agree with the superintendent in the belief that a school system benefits greatly by advice from every source, and especially by suggestions offered by those who are performing the daily work of the schools, and we have confidence that the Superintendent will work out some plan which will contribute to that end in a form satisfactory to all concerned."

TEACHERS AND ADMINISTRATION

—The state of Wisconsin has 500 more teachers than the schools can absorb. This is in accordance with a statement made by J. C. Anderson, Assistant State Superintendent of Schools. "Until two years ago it was necessary for the state department to issue emergency certificates to meet demands for teachers, particularly rural teachers, in Wisconsin," Mr. Anderson said. "In 1921 more than 700 of such certificates were issued. There has been a change, however, and the state department has stopped issuing emergency certificates. This change has been due largely to a general readjustment in the teaching profession since the war, when the supply of teachers exceeded the demand. During the war period the opposite was true. Since the supply has exceeded the demand, however, there has been a marked tendency for teachers, or those who intended to become teachers, to go into other professions. This has reduced the number of new teachers available."

—Public school teachers in Illinois earned \$60,226,162 in 1923, according to a recent report of State Supt. Francis G. Blair. The report shows that 41,623 teachers were employed during the year, of whom 7,000 were men and 34,000 were women. It was shown that 4,328 teachers have been employed in the same district for twenty years, 112 are classed as veterans in the service, and 4,736 were teaching for the first time.

(Continued on Page 107)



The Johnson Service Company's own branches in twenty-eight principal cities of United States and Canada furnish immediate Johnson service and supply, Johnson installation, and readiness with Johnson attention ever after installation is made. Through these branches is obtained Johnson Service equal to the high degree of transacting directly with the home office and factory. You are not subjected to long distance delays, or the hired attention of a local mechanic. Consider the value of such close contact with the manufactures as reason why The Johnson System of Temperature and Humidity Control is best to install in your schools.

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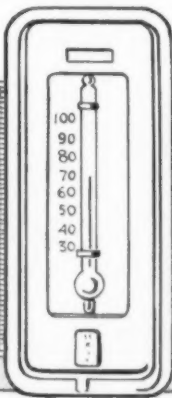
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The National Thermostat

Universally acknowledged as the most simple, efficient and economical method of temperature control for schools—a reputation gained by 22 years of service.

The National System insures a thoroughly dependable and sensitive control of temperature with a minimum of maintenance cost, and a positive absence of trouble and repairs. Twenty-two years of experience, based on continued successful operation, have conclusively demonstrated the correctness of principles involved in the design and construction of the various thermostats and valves employed in the National System.

Installation in schools throughout the United States and Canada attest to the merit and desirability of the National System as an efficient and economical means of temperature regulation.

List of school installations sent on request.
Investigations invited.

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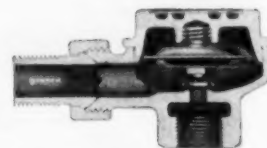
Offices in Principal Cities



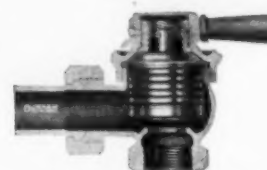
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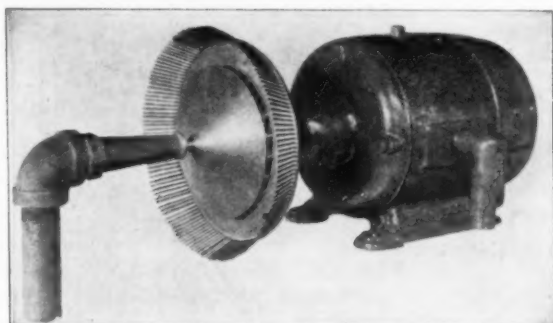
Children during the formative years when both health and character are in the making, deserve the best school heating system that money and wisdom can provide for them. The years spent in school are too important to have less than a Dunham Heating System safeguard health and provide freedom from distraction during school hours.

A Dunham Heating System is quiet, healthful, clean and safe. It is inexpensive to operate, because the use of Dunham Steam Heating Specialties practically eliminates repair costs through their long life and year-after-year dependability.

Seventy branch and local sales offices in the United States and Canada bring Dunham Heating Service as close to your office as your telephone. Consult your telephone directory for the address of our nearest representative in your city.

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The Turbo Atomizer

The Turbo Atomizer is the heart of Bayley Air Washing Systems. It does away with multiple orifice sprayers which are easily clogged and which produce a spray not altogether free from holes.

It operates with low current consumption and at very low water pressure, throwing an even, finely divided spray radially against the walls of the washing chamber.

THREE TYPES ARE BUILT AROUND THIS PRINCIPLE

TYPE "A"—For washing and humidifying (cleaning).
The Type "A" Washer is installed where cleaning is the primary consideration. It uses the water over and over, and removes 98% of foreign matter from the air. Humidity may be added as desired.

TYPE "B"—For washing and de-humidifying (cooling).
For cooling air, the cleaning being incidental, Type "B" Washer, consisting of tandem sprays, is installed, and is capable of bringing the temperature of the entering air practically to the water temperature.

TYPE "C"—For washing without humidifying (drying).
Where clean air for drying processes must be obtained without increasing its humidity, the Type "C" Washer is installed, using a special washing emulsion.

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give perfect ventilation—with absolute elimination of trouble—and at least expense. That's ALL a school building requires of a ventilator.

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is our record at Virginia, Minnesota, where Buffalo Fans and Carrier Air Washers are furnishing clean, heated or cooled air to help insure good health and comfortable working conditions for teacher and pupil.

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are erected at least cost, have high initial efficiency and negligible maintenance cost. The fans are silent and sufficient. Let us show you how fuel can be saved by this equipment. Send for Catalog No. 480-37.

CARRIER AIR CONDITIONING COMPANY OF AMERICA
186 Mortimer St. Buffalo, N. Y.

(Concluded from Page 104)

—Niagara Falls, N. Y. The city council has asked the school board to adopt a bi-monthly plan in paying teachers, paydays to be on the fifteenth and the last day of each month. In the past, the payday of teachers has fallen on the last day of each month, and it is pointed out that this works a hardship on teachers.

—Andover, Mass. The maximum salary for grade teachers has been raised from \$1,400 to \$1,500. High school teachers have been raised from \$1,700 to \$1,800.

—Cleveland, O. At a recent meeting of the board, dissatisfaction was expressed with the present salary schedule under which teachers are paid high salaries. A demand was made by one of the members that the schedule be revised downward. The board has intimated that it will undertake a study of the entire salary problem with a view to more equitable distributions.

—The school board of Columbia County, Washington, has adopted a grading sheet for marking teachers in their work. Each teacher will be graded and the cards filed for reference. Information will be given out where teachers apply for positions in other districts or counties. Teachers are graded on discipline, presentation of subject matter, neatness, promptness of reports, community work, enthusiasm, industry, professional spirit, progress in profession and moral influence. No credit is given for scholarship or for work accomplished in preparatory schools since this is conceded to be but a tool.

—Philadelphia, Pa. Supt. E. C. Broome has urged that teachers take advanced study courses in order to prepare themselves for promotion where vacancies occur in the schools. In a letter addressed to the teachers, Supt. Broome points out that there are 2,400 positions distributed among the several schools of the city. Of these positions, about ten per cent become vacant each year, and are open to ambitious elementary teachers qualified to fill them. In the senior high school, there are nearly a hundred department-headships to which elementary teachers may aspire and a dozen such positions are filled every year.

Senior high school teachers may also qualify for elementary principalships to a greater extent than at present. There are 207 of these

positions to which such teachers may aspire after the completion of advanced courses qualifying them for promotion.

Speaking of the advantages of teaching in Philadelphia, Supt. Broome points out that teaching conditions in the city are agreeable, the salaries are larger than in most cities, salaries are never held up, and schedules adopted by the board are adhered to.

—Atlanta, Ga. Supt. W. A. Sutton has recently explained his attitude on the married teacher problem. He declares there has never been a disposition to eliminate married teachers regularly employed and on the civil service list. Young women who have just entered the system, and those not entirely proficient, are usually not retained after marriage. It appears wise that these teachers upon marriage give their entire time to the home so that there are no divided interests for the first few years. There are at present from one hundred to two hundred married women teachers on the staff.

—The South Carolina State Board of Education has adopted a recommendation of the committee on certification providing for the raising of teaching standards in the state. Beginning with January, 1925, graduates of high schools will be given second grade certificates only after they have completed the work of one college year or its equivalent.

The changes in requirements also include a provision that no permit or third grade certificate may be issued; emergency certificates will be issued in their places. It is also provided that the holder of a second grade certificate may build up a certificate by earning credits for a year's work in college.

Any teacher holding a second grade certificate may take summer school work as a means of working up to a certificate.

—Oshkosh, Wis. The board has adopted new rules to govern the appointment of teachers. The first provides that resident teachers shall be given the same consideration as non-residents in the appointment of first-year teachers.

Another rule provides that the present policy of employing married women teachers shall be discontinued. In the future, single women will be given preference in all appointments, exceptions to be made in the case of widows and especially worthy cases.

—The first group of evening school teachers ever given permanent tenure in New York City have received their permanent appointment at the hands of the board of superintendents. Several hundred who had completed the three-year probationary period were admitted to the same privilege as that enjoyed by day-school teachers.

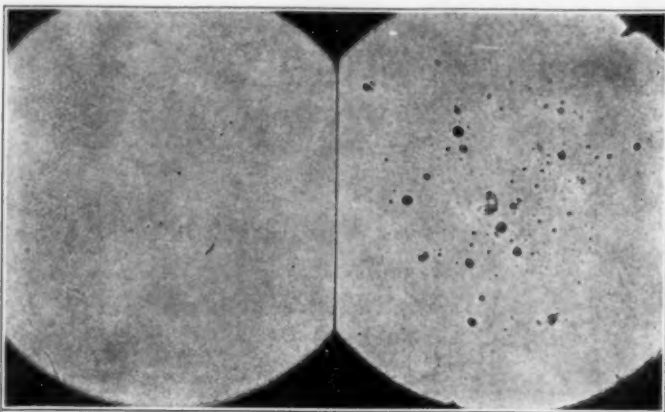
—The Wilmington, Del., board of education will present a measure to the state legislature which contains the following provisions: First—That the estimates prepared by the board for the needs of the schools for the ensuing fiscal year shall not be subject to revision by City Council or any other official body. Second—That school bonds in future shall be issued in the name of the Board of Public Education of Wilmington. Third—That the board be authorized to fix a school tax not to exceed seven mills on the \$100 of assessed valuation of real and personal property in the city of Wilmington, independent of other sources of revenue. Fourth—That the Board of Education be authorized to make purchases up to and including \$500 without advertising for bids, and that the board be authorized to award contracts to the lowest and best bidder.

—School district No. 17, Gray County, Kansas, has been brought into court at Topeka to explain why it is passing the interest on a \$12,000 bond issue of October, 1922.

—Allen P. Keith, superintendent of schools at New Bedford, Mass., recently stressed the importance of teachers arriving at school a half hour before opening. "All teachers should recognize the advantage of reaching the classroom early," he said. "By arriving half an hour before the pupils do, you can accomplish much more than at any time of the day. Your mind is clear and you have time to dispose of whatever work there is so as to start with a clean slate. Then, too, it permits time to formulate your work for the day, which is not possible if a teacher rushes into the classroom only in time to call her class to order."

—The Teachers' Interests' Organization of New York City has raised the question as to what age in a teacher's life the quality of work begins to decline. It is the firm conviction of the association that a teacher cannot possibly

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do good work in a classroom after teaching for thirty years. The association went on record as endorsing a campaign to secure retirement on thirty years of service, and retirement on the average salary for the last five years. It was brought out that the pay on which a teacher is retired at the present time is often insufficient to support her. A motion was carried that retired teachers be allowed to substitute in classes where their services may be needed.

—In discussing the question of married women teachers the Newark, N. J., News says: "One basis for the existence of a rule which discriminates against married women is that this class of teacher enters into competition with unmarried teachers who have prepared themselves for the work and, being dependent upon themselves, need the salary as a means of livelihood. The question is also more or less pertinent, whether or not the work of the teacher enters into competition with the home duties and obligations of a married woman and also whether or not motherhood, where it exists, does not conflict with the best interests of the schools when the mother happens also to be a teacher."

TEACHERS' SALARIES

—Concordia, Kans. The salary schedule has been revised to give women in the high school a salary of \$1,503 per year. This represents an increase of only \$18 per year.

—According to Associate Supt. Charles W. Lyon, chairman of the survey committee of the New York board of superintendents, teachers' salaries should be fixed as well as paid by the board of education. He is a firm believer in "home rule." Suggestions from various groups interested in salary revisions have been received by the survey committee and schedules discussed in the light of claims made in the numerous briefs and letters.

One of the most difficult problems, according to Mr. Lyons, is to reach a differential between certain closely associated salary groups. There is evident a desire to be fair to all, to grant no favors, but to consider each claim made by a group, party or individual. The decisions regarding teachers' salaries should be made in New York City, and not in Albany.

—All secondary school teachers in the state of New York are subject to the principle of

"equal pay for equal work," under the terms of a law passed by the 1924 legislature. Ten other states prohibit discrimination between men and women teachers in the matter of salary.

—Arabi, La. The St. Bernard Parish school board has adopted a salary schedule providing for gradual increases each year.

—The high school teachers of St. Louis, Mo., are criticizing the board of education of that city for failure to increase the salaries. The board pleads a shortage of funds. Hugh H. Barr, president of the High School Teachers' Association says: "The board of education may as well understand that the high school teachers have no intention to acquiesce in any such disposition of their salary request."

—The members of the Cleveland, O., board of education deny that a reduction in teachers' salaries is contemplated. At least five members favor a slight increase in certain items on the schedule. Rees H. Davis and Mary C. Sanford hold that individual raises should not be made until the entire schedule is completed. Two members, President E. M. Williams and Mrs. Clara Tagg Brewer, favor increases recommended by the superintendent.

—Chicago teachers are voicing the fear that the salaries which were increased in 1922 to adjust them to the deflated dollar, may be reduced. This is the statement advanced by Arthur Evans, a writer in the Tribune. The writer says that the tendency is to increase the size of the classes and thus obviate salary reduction.

—The Research Division of the National Education Association has begun work on a salary study covering the year 1924-1925, which is to be similar to the report of two years ago, entitled "Teachers' Salaries and Salary Trends." The Association plans to issue a number of special salary tabulations to meet the needs of individual cities, which will be available at the cost of preparation.

—The teachers of New York City have requested a thorough revision of teachers' salaries and an increase for next year. The board of education is determined, as expressed by President George J. Ryan, to eliminate all injustice.

—The Minneapolis, Minn., board of education has adopted a resolution which reads: Every

teacher shall file application for membership in the Minneapolis teachers' retirement fund association when signing a contract accepting position.

—At Joliet, Ill., under nourished children will be provided with noon meals at the expense of the board. The board expects to expend \$200 a month for this purpose.

THE WISCONSIN EDUCATION PROGRAM.

—The regular annual meeting of principals and superintendents of Wisconsin schools was held at the call of the State Superintendent in September, in the senate chamber of the State Capitol at Madison.

The first day was devoted largely to reports of committees of the state superintendents' association, and to recommendations for educational programs and legislation. The state's educational program, as outlined by Supt. J. C. Callahan, is as follows:

1. A state-wide plan for financing education so that each community can furnish, with state aid, adequate educational facilities for its children.
2. A teacher with minimum education of two years of professional training in addition to high school graduation for every elementary classroom.
3. A teacher with at least four years of academic and professional training obtained in a normal school, college or university for every high school classroom.
4. Certification of teachers on a uniform state plan.
5. Consolidation of rural schools wherever practicable by vote of the people.
6. A good high school within the reach of every boy and girl in the state.
7. The cost of education of mentally and physically handicapped children to be cared for by the state.
8. Closer relationship between the home, industry and the schools.
9. A minimum school year of nine months.
10. A county board of education, with power of selecting the county superintendents and the supervising teachers.

The last day of the convention was devoted to the discussion of important educational problems.

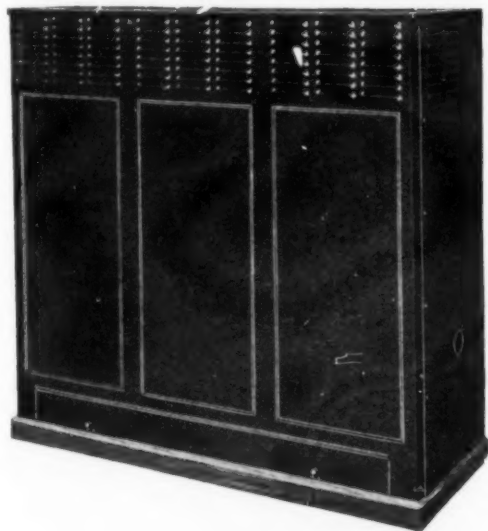
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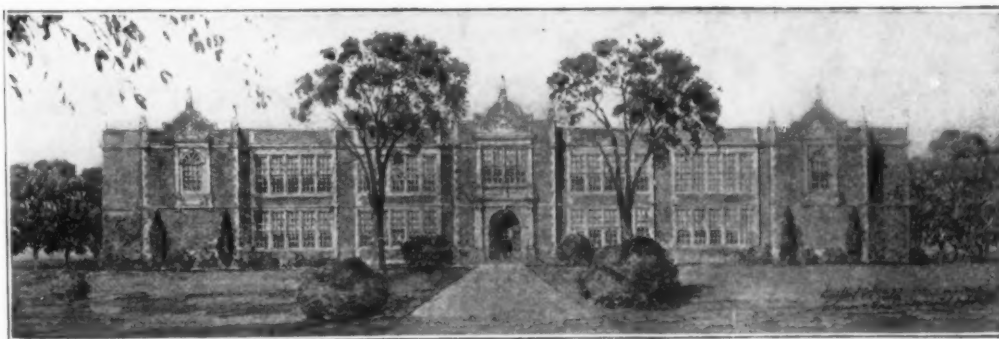
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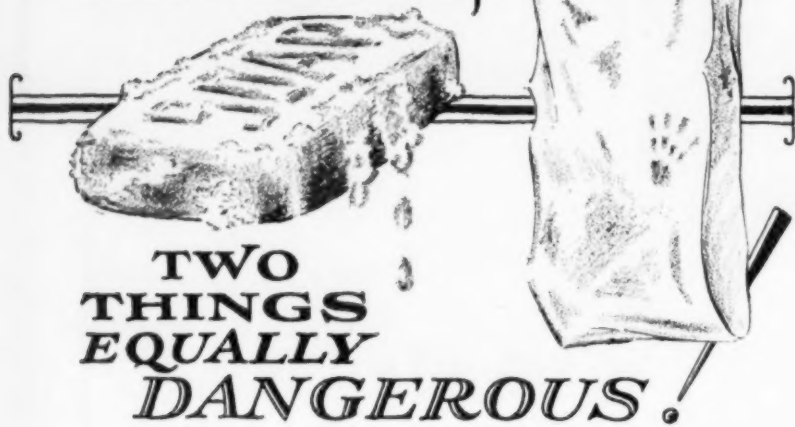
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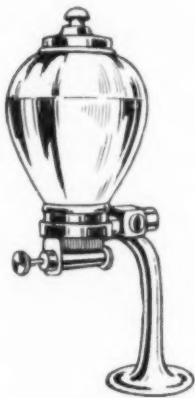
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and the
Public Bar of Soap*



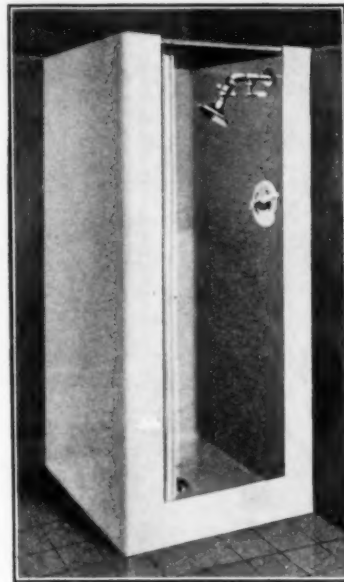
In modern offices, schools, and factories everywhere the roller towel has long ago been banished as a known germ carrier. The public bar of soap must also go, for it, too, spreads disease. Liquasan, the Liquid Soap, is the answer, for it is good quick lathering pure soap but touches nobody's hands but yours.

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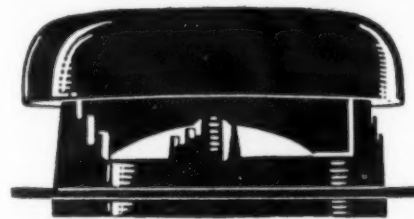
The Stall can be set in batteries of any number to suit requirements.

The walls of the stall are made of a continuous sheet of No. 10 gauge copper bearing steel which with the riser are welded to a dished bottom with waste outlet in center.

After installation is completed, the interior and exposed exterior of the stall should be finished with water proof enamel paint.

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The modern school auditorium is now a community center. Lectures, Concerts and Entertainments are held there continually.

Of course proper ventilation is essential to health and comfort. You can utilize the plenum chambers to force fresh air to the floor and balcony, regulating the distribution, with the Knowles Mushroom Fresh Air Diffusers (either up-draught or down-draught methods).

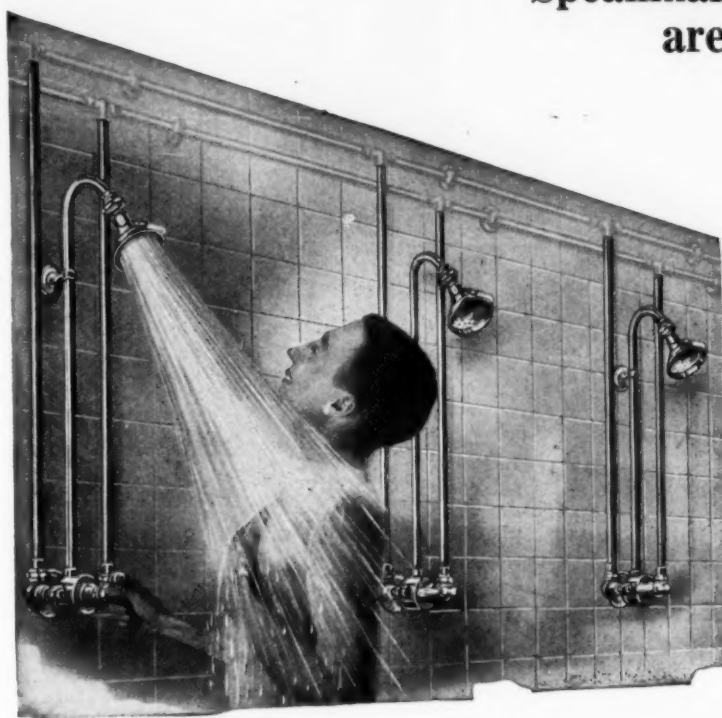
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We will be glad to give School Boards interested in showers any information we may have relating to various types of installations.

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SPEAKMAN SHOWERS



MORBIDITY AMONG SCHOOL CHILDREN IN HAGERSTOWN, MD.

The United States Public Health Service has made an interesting study of illness and "days lost from school on account of illness" among white children in the city of Hagerstown, Md. The study was conducted during the school months of the period from December, 1921, to May, 1923, inclusive. As might be expected the analysis showed that colds were the most common causative factor both in the number of cases of illness and in the total number of days lost per child. Influenza and measles were next in the number of days lost, but headaches, digestive disorders, tonsillitis, and sore throat were more frequent causes of brief absences than either influenza or measles.

The city of Hagerstown has a population of approximately 28,000 and at the time of the study had a school population of about 5,000 of which 92 per cent were native white children and 4 per cent were foreign born white children or children of mixed white parentage.

The study indicated that there were 2,333 cases of illness per 1,000 children per school year, or 2.3 cases per child, with a loss of 7.3 school days per child per year. The boys had 2.2 cases per child against 2.5 for girls, and 6.9 days lost against 7.7 days for girls. The days lost per case, however, were practically the same for both boys and girls. The total number of school days lost per case and the number of days lost per child per school year decreased very decidedly with the ages of the children between 6 to 10 years. Above the age of 10 the reduction in illness was not very marked.

In computing the causes of illness it was found that colds were the single greatest cause and that in successive order the following diseases were important causes:

Headaches and neuralgia, digestive diseases, tonsillitis and sore throat, grippe and influenza,

toothache, accidents, measles, earaches, eye trouble, skin diseases. The greatest number of days lost because of illness was due to the following diseases:

Whooping cough, 24½ days; scarlet fever, 24 days; scabies, 12 days; tonsils, 11 days; pediculosis, 10 days. In general girls lost far less time than boys in cases of whooping cough, scarlet fever, and scabies, but lost more than boys in cases of pneumonia, diphtheria, measles, tonsillitis, and pediculosis.

Age Incidence of Certain Diseases

The age of greatest incidence for the different diseases is of significance in considering the school progress of children. As already indicated all diseases show a marked decrease between the ages of 6 and 10, and from there on the decrease was at a comparatively low rate.

However, some diseases increased rather than decreased. Neuralgia showed a decided increase up to the age of 12, and from there on declined rapidly. Respiratory diseases showed a general decline up to the age of 14, and a slight increase to the age of 17. This was true also of colds. Digestive diseases seem to increase between the ages of 6 and 10, to decline between the ages of 10 and 11, to increase rapidly at the age of 12, and from there on decline. Tonsillitis increased rapidly from the age of 6 to 8, reached the highest point at the age of 11, and from then on decreased. Accidents seem to be most common at the ages of 10 and 12. Skin diseases show a general decline from the age of 6 to 17. Operations on tonsils increase rapidly between the ages of 6 and 7 and decrease at a strong rate up to the age of 16. Measles, whooping cough, and chicken pox decrease rapidly from the ages of 6 to 12 and practically disappear at that time. The curves for certain diseases show considerable irregularity.

The weather apparently has considerable influence on the causes and number of cases of illness. In the study of the children of Hagerstown the total number of illnesses reached the highest point in March, 1922, and about the middle of February, 1923. In each year the curve shows that the illnesses grow very rapidly immediately at the beginning of the school year and decline with equal rapidity after the peak has been reached. Colds reached the highest

peak of incidence in March, 1922, and February, 1923, respectively. Grippe and influenza had almost identically the same curve. Tonsillitis reached its highest point in January, 1922, and in the same month for 1923. It is possible that this variation of diseases was influenced largely by the fact that during March, 1922, and February, 1923, there were epidemics of influenza which affected the entire community.

DISEASES IN AND OUT OF SCHOOL

Dr. W. A. Evans, in the Chicago Tribune, discusses the findings of a study of 32,000 children in schools in several parts of the United States, made by the U. S. Public Health Service, and published in pamphlet form.

The report shows that the important age in whooping cough is the first two years of life. At 6 years of age, 56 per cent of the children have had the disease. The disease is most prevalent in the sixth year of life, and at age 11, the end of the fifth year in school, three-fourths of the children have had the malady. At age 19, 22 per cent have not had whooping cough.

When children enter school at 6 years of age, about 70 per cent have already had measles. During the first year in school, about one-sixteenth of the children have had measles. During the following four years one-eighth of them develop the disease. If school officials and parents would concentrate on the 30 per cent who have never had measles, and watch over them closely, they would greatly lessen the prevalence of the malady. The pre-school age periods are more important than the school periods. The first five years in the grades are of importance.

The study also shows that only one-quarter of the children who enter school at 6 years of age have had mumps. It follows that the child in the home, the child of pre-school age, is far safer from mumps than he is from measles or whooping cough. At age 19, nearly two-thirds of all children have had mumps. The age at which the disease is most prevalent is 7 to 9, and one-tenth of the school population have mumps during this period. Combining all the years of school life—5 to 19—into one school period, we find that during the period as a whole, mumps prevails more than does any other of the six disorders investigated.

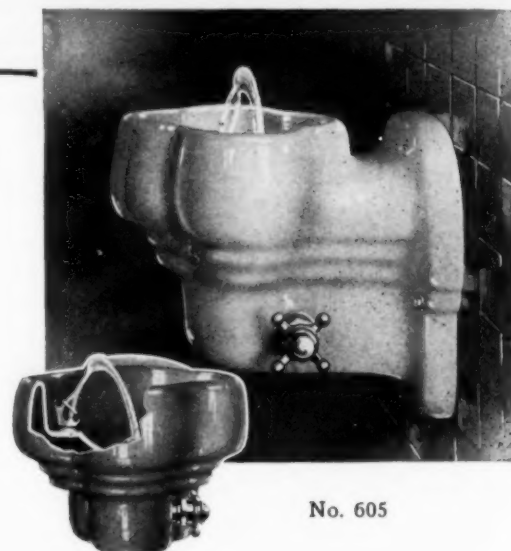
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When children enter school, one-third of them have had chicken-pox. When they leave school, a little more than one-half of them have had this malady. The important chicken-pox year is 5 to 6, when nearly one-ninth of all children have it. In age 6-7, the percentage developing the disease is 0.6, but after 7, few children have it.

HYGIENE AND SANITATION

—A study of the prevalence of thyroid enlargement among school children in Montana during the school year 1922-1923 has been reported by Dr. F. T. Foard, acting assistant surgeon of the United States Public Health Service in the Public Health Report for September 12th. In the study, sections of counties in the Rocky Mountains and up to more than 100 miles east of them were selected in order to compare the prevalence of goiter in mountainous and non-mountainous districts. The study comprised the examination of 13,937 children and the data collected represented a minimum rather than a maximum prevalence of thyroid enlargement, since it included only definitely enlarged thyroids.

The study showed that there are 3,011 simple goiters, or an incidence of 21.6 per cent. The children were of all ages from 6 to 20 years, and in 4,690 of them, classified by sex, the goiter incidence among girls was 32 per cent; among boys, 13.4 per cent, a ratio of 2.4 to 1. Children living in rural districts, where water from wells or springs is used, had a greater incidence of thyroid enlargement than children living in cities and towns where water supplies were derived from surface streams and imported vegetables purchased. The general rule, with the exception of Lewiston, was that enlarged thyroids were decidedly more prevalent in the isolated districts than in towns and cities. It appears that simple goiter among Montana school children is so prevalent that it may be considered a public health problem.

—Under the direction of the Milbank Foundation, an orthopedic clinic has been opened at Syracuse, N. Y., for the treatment of children crippled by infantile paralysis.

—C. R. Warwick, of the Florida board of health, conducted a health campaign in Polk County in September, in which all school chil-

dren were given a physical examination. A visit was made to each school as a preparatory measure to the examinations carried on. A local hospital donated the services of three nurses, and in each community local physicians assisted in the examinations.

—Routine weighing and measuring, and physical examinations of pupils in all grades, will be discontinued this year in the Baltimore, Md., schools, under orders issued by Dr. H. W. Buckler, chief of the division of hygiene. In place of requiring examinations of all children, teachers will select those children showing need of physical examination. The nurse in turn verifies the teacher's selections, and such children are cared for on the doctor's regular visiting day. Nurses will inspect pupils for defects of the eyes, ears, nose and throat. Special vision tests will be made of pupils in the fourth and sixth grades and of children noted by teachers as of poor hearing or sight.

A new feature of the work this year will be visits of nurses to the homes of sick children. Where children of pre-school age are found in need of medical care, parents will be informed of the visiting day of the physician at their school, and such children will be taken there for medical examination and attention. Only pupils of the kindergarten and first grades, and new entrants without health records are to be weighed and measured at the schools this year.

—In the reorganized health promotion work in the public schools of San Antonio, Tex., each pupil will be given a physical examination by a physician and the results recorded. Forty physicians will devote some time each day for about three weeks to this work. A report of the examination will be made to the parent or guardian of the child, advising them to consult the family physician. Heretofore, school children have been examined by the school nurses who were regularly employed for the school year.

—In discussing diphtheria epidemics and methods of suppressing them Dr. Frank W. Laidlaw of the New York state health department lays down the following conclusions: A toxin-antitoxin campaign should be instituted upon the appearance of diphtheria in any com-

munity. While practically no effect can be expected upon the case rate for two months, after that time sufficient results may be expected to justify the effort expended, and a decided effect may be produced upon the increased incidence after the subsiding of the outbreak. Some degree of modification of the severity of the disease may be expected as early as three weeks. Three doses of toxin-antitoxin can not be expected to immunize every individual.

—The board of health of Dallas, Texas, has broadened the scope of the physical examinations of school children this year. Under the new plan, school physicians were requested to note organic defects and to examine the sight and hearing of children. Reexaminations to detect communicable disease among the pupils were also conducted. Defects are reported to parents who are free to act on their own initiative.

Building Program at Flint, Michigan

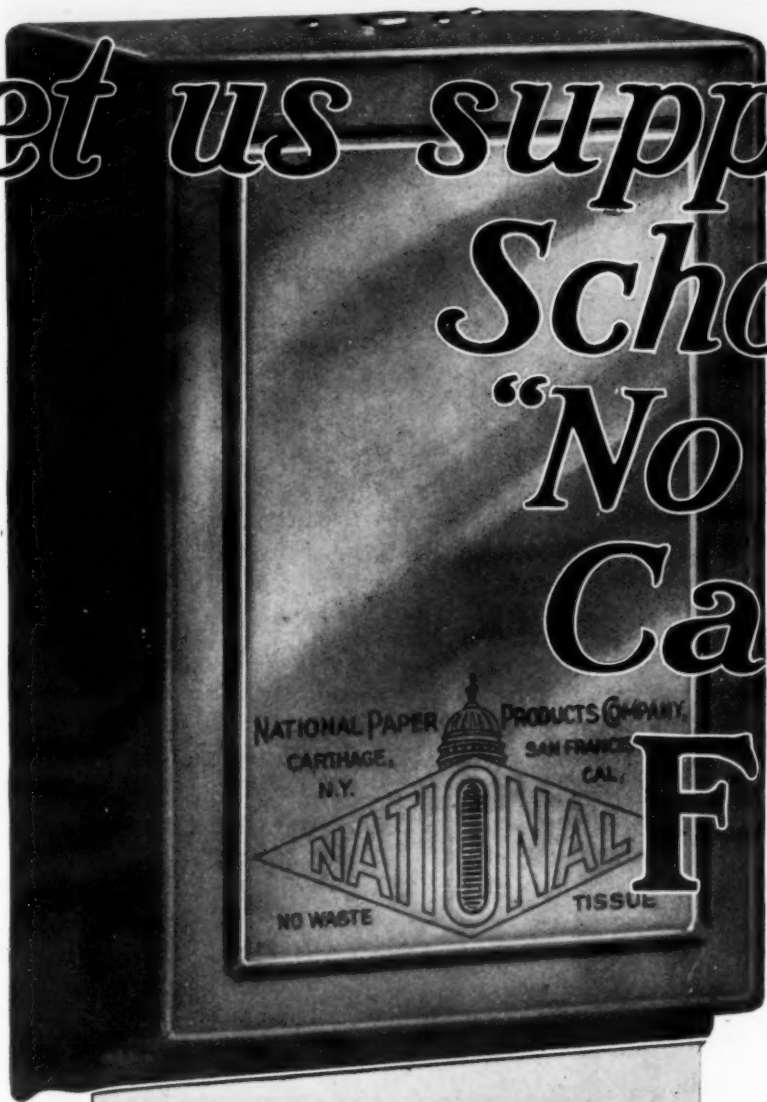
The board of education of Flint, Michigan, has under construction at this time four grade school buildings and two junior high school buildings. These six buildings, costing approximately \$3,000,000, constitute the 1924 program.

The present building program was adopted in 1920. At that time a high school site of 57 acres was purchased at a cost of approximately \$800,000. In 1921-22 there was erected on this a magnificent high school building costing \$1,400,000. During the same year, three elementary buildings were constructed costing approximately \$300,000 each or, in round numbers, \$900,000. By September 1, 1925, there will have been added in the period from 1920 to 1925 a total of ten school buildings, an outlay for buildings and sites of \$6,100,000.

The program for 1925-30 is in the process of formulation. It is impossible to say exactly what buildings will be erected and how much they will cost. The public school enrollment in Flint in 1915 was 7,414; in 1920 the enrollment was 15,194; and on September 30, 1924, there were 20,274 enrolled.

Flint is one of the most rapidly growing cities in America. It is significant that there are at present only three school buildings in use that were built more than twenty-two years ago.

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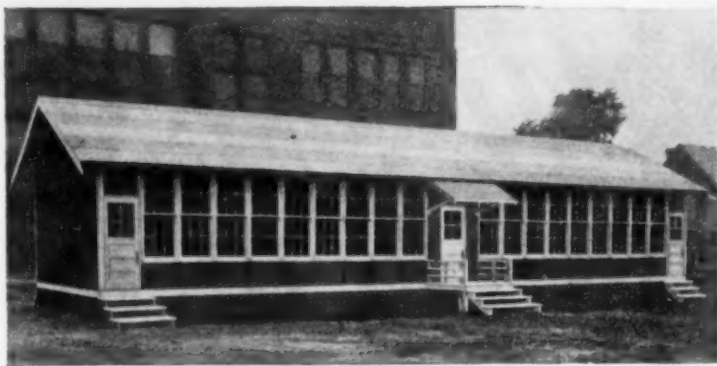
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SCHOOL BOARD NEWS.

—Omaha, Neb. The school board has asked the voters to approve a two-and-one-half-million-dollar bond issue at the November election to meet the pressing needs of the schools.

—The voters at Winlock, Wash., have approved an extra school tax levy of five mills for school purposes.

—Battle Creek, Mich. The school board has adopted a policy of setting aside \$100,000 each year toward a building fund for new schools. The establishment of the fund is intended to prevent as far as possible the issue of bonds.

—New York, N. Y. The board of estimate has tentatively approved the budget of \$100,610,189 for the operation of the schools this year. Of the entire amount, the city will provide \$79,724,527, and the state will pay \$20,885,661. The city's share of the total increase for 1925 amounts to \$1,686,726. There were only two items on which the examiners and the budget committee were not in agreement, \$25,000 for advertising and \$25,000 for the continuance of the survey.

—Oakland, Calif. The board recently discussed the expenditure of \$9,600,000 of school bonds voted by the citizens on October first. The board has selected four important subjects which are to receive its attention. These are standardization of buildings, elimination of political considerations, producing a dollar of value for every dollar of expenditure, and the appointment of an advisory board of citizens to cooperate with the board on expenditures and supervision of the construction work. Mr. W. L. Whalen, chief of the construction activities, will have entire control and responsibility for the operation of the building program.

—Andover, Mass. A new school building at Shawshoen Village, one of the finest of its size in the state, was opened on October 14th.

—New York, N. Y. The corner stone for the High School of Commerce Addition was laid on Tuesday, October 7th, with appropriate ceremonies.

—Ludington, Mich. For the sixth time, an election was held on September 29th to vote on an issuance of \$85,000 in bonds to build an addition to the high school. The addition is intended to provide additional classrooms, as well

as a gymnasium and an auditorium.

—Battle Creek, Mich. The board has adopted a budget of \$771,631 for the year 1925, which is an increase of about \$9,000 over the last year.

—The distributive school fund of Illinois, which was recently changed by the state legislature, requires that each county superintendent prepare a county budget, giving a summary of the budget information in each school district. The law further provides that special help shall be given to school districts levying a tax to the limit of the law, and having an assessed valuation of less than \$40,000 per teacher. There are three such districts in Grundy County.

—The state board of tax commissioners of Indiana has reduced by ten cents, the school tax levy for 1925, as adopted by the Indianapolis school board. The reduction means that one of three new grade buildings included in the 1925 program will be eliminated. The new west side high school, estimated to cost \$500,000, will cost the taxpayers more than that amount. The increase is due to the elimination of the eight-cent levy and of the two cents provided through the special fund.

—Salt Lake, Utah. The school board has asked for a tax anticipation loan of \$400,000 for school expenses to carry it through until taxes are collected and received.

—Los Angeles, Calif. The school board has outlined an expansion program calling for the immediate erection of 77 new schools, at an estimated expenditure of \$13,600,000. The program for the next twelve months will involve a program twice as great as any previously undertaken by the board. Of the 77 new structures, 55 will be elementary schools and 25 will be junior and senior high schools.

The erection of these buildings will consume about two-fifths of a \$34,000,000 appropriation. The remaining three-fifths will be held in reserve to be used for the construction of additional buildings in the future.

—President Loyal Durand of the Milwaukee board of school directors has issued a statement in which he holds that the \$1,700,000 asked for school sites and buildings in the new budget may be easily used in the period of one year. To indicate the need of every dollar of the

appropriation, attention is directed to the use of 100 barracks for high school and grade classes, the use of assembly rooms and basements for the accommodation of 900 children, and the use of part-time classes for First B grades.

—A new school at Detroit, Michigan, has been named the Robinson school, in commemoration of William E. Robinson who served the city as superintendent of schools from 1886 to 1897.

—The Dubuque, Iowa, board of education has allowed the use of its three high school auditoriums for political meetings, one a month to each of the three political parties.

—Caruthersville, Mo. The corner stone of a new high school was laid on September 30th, with special exercises in which the entire community participated.

—Georgetown, Ill. The corner stone of a new school was laid on October 3rd.


—Pineville, Ky. An annex costing \$65,000 has recently been added to the central school. The building consists of a combination auditorium-gymnasium and provides space for a junior-senior high school, seven classrooms, a laboratory and study hall. The building was financed partly by a bond issue and partly by free will contributions on the part of citizens.

—Milton, Mass. The Tucker school, erected at Mattapan, has a capacity of 700 students and was erected at a cost of \$265,000. Additional land has been obtained for use as a playground. An addition to the present high school has been proposed to provide accommodations for a large increase in the junior and senior high schools.

—Guthrie, Okla. The corner stone of a new high school costing \$185,000 was laid in September. Henry S. Johnston of Perry, acted as chairman of the exercises.

—Elgin, Ill. The citizens will shortly be asked to approve a proposition calling for a school building program of \$650,000. The program provides for the erection of two junior high schools, one on the west side of the city and the other on the east side.

—Pottsville, Pa. The school board has rescinded the resolutions passed at a meeting in February last, calling for the erection of a \$250,000 high school on a certain site. At a recent meeting, new resolutions were passed providing

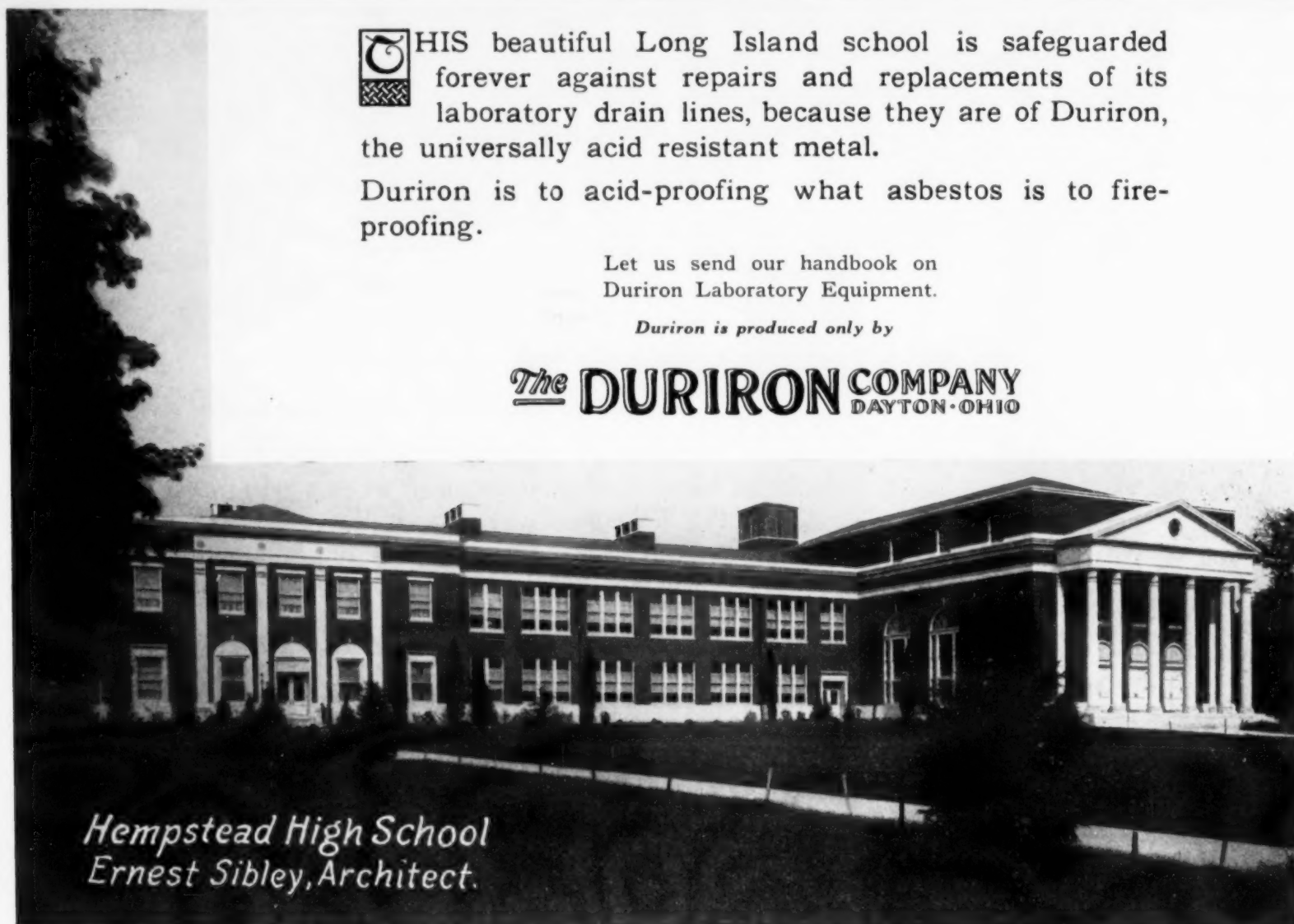
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for an increased indebtedness of \$500,000 for the purchase of a site and the erection of a high school. The resolution also called for the erection of a grade school on the former site, and for an athletic field.

—Camden, N. J. The business department of the schools has been authorized to negotiate a loan of \$100,000 for general expenses to carry the schools over until the city appropriation is paid. The money bears interest at six per cent and will be paid off by the city as soon as the tax money is received.

—Newark, N. J. The school board has employed an engineer to plan and supervise the construction of the city field stadium. Bonds in the amount of \$150,000 have been authorized for the project. The stadium will have a seating capacity of 12,000.

—Galveston, Tex. The school board has changed the name of the Goliad school to the Brewer W. Key school, as a memorial to the late Brewer Key, Galveston philanthropist, who had bequeathed \$200,000 to the school children of the city.

—Yoakum, Tex. Without a bond issue and without raising the taxes, the school patrons of Hoheim Prairie, a rural school district, have erected a modern school for the community. The fund for the building was raised by means of picnics and auctions of donations from parents of children, and the farmers acting in cooperation, did most of the construction work.

—The corner stone of the Greenfield high school, at Greenfield, Ia., was laid on October first.

—Ludington, Mich. By a majority of 863, the voters of Union District have approved the issuance of \$85,000 in bonds for an addition to the high school. Plans for the building have been prepared by Architects Robinson & Campau of Grand Rapids.

—The Indiana department of education was operated during the fiscal year with a saving of \$4,034 of the appropriation of \$52,100, according to a recent statement of State Supt. B. J. Burris. Balances in the various funds appropriated for the state department's office were as follows: State superintendent's fund, \$1,142; division of school attendance, \$358; teacher-training and licenses, \$13.15; division of school inspection,

\$470, and state board of education, \$2,049.

The license division collected a total of \$10,607 in fees during the year. This amount, together with the balance on hand at the beginning of the year, amounted to \$17,971. Disbursements for the year were \$12,953, leaving a balance of \$5,018.

—Mayor Hylan, who gave the principal address at the dedication exercises of the Julia Richman high school, New York City, gave Governor Smith credit for making possible the construction of this building by bringing about amendments to the pay-as-you-go law limiting appropriations for school construction.

Under an old law, the construction of new schools was practically prohibited since the city was from \$75,000,000 to \$100,000,000 in arrears in school appropriations. With the amendment of the law, it has been possible to carry through a school construction program amounting to \$160,000,000.

The school has received an American flag presented by former court justice William N. Cohen.

—Schenectady, N. Y. The superintendent of schools has cooperated with the city officials in carrying out a program of economy for the operation of the school system. The superintendent has issued a special bulletin in which he cautions teachers and principals to exert great pains toward economy in school expenses. He writes:

"The recent preparation of the school budget for 1925 brought very forcibly to the attention of the board of education the necessity for more careful use of school materials: books, paper, coal, pencils, art, manual training and home-making supplies, electric lights, car tickets, postage, etc.

"Whenever persons in the service of the public, such as we members of the department of public instruction, either thoughtlessly, ignorantly or wantonly waste the public's money for non-essentials and make requisition for materials that are desired but not absolutely necessary, the rent payer indirectly, and the taxpayer who pays the bills directly, have a right to complain.

"Will the principals, teachers and all others in the department of public instruction take special pains not to increase the expense of run-

ning the public schools? We should all cooperate in seeing that the expense of school operation is reduced to a minimum consistent with efficiency and should maintain the same attitude of economy toward school expense items that we would in operating our own homes; in fact, even more so because others are concerned in the expense besides ourselves."

—Jamestown, N. Y. The school board has borrowed \$56,000 from seven local banks to pay teachers' salaries long overdue. The loan has relieved the board of some embarrassment resulting from a controversy over the 1925 school budget.

—Columbus, O. The school board has asked the citizens to approve a levy of 2.4 mills at the November election to replace the present 3-mill levy voted five years ago. The levy which is to run for three years is intended to insure the granting of contracts to teachers next year.

—Honesdale, Pa. The Union consolidated school district has proposed a bond issue of \$225,000 for the erection and equipment of two grammar schools.

—Harrisburg, Pa. The school board has asked the voters to approve a loan of \$1,200,000 for the construction of the Harris school, and \$550,000 for the completion of the William Penn school.

—Worcester, Mass. The school board has approved a report of its special committee providing for a two-year building program covering the erection of five new schools, seven additions, and an addition for the High School of Commerce.

—The school boards of Cuba, Ill., comprising two school districts, have offered a reward of \$50 for information leading to the arrest and conviction of parties who recently broke into the high school and rifled the superintendent's desk.

—In an effort to prevent a court action, the school board of Buffalo, N. Y., has decided to purchase the plans of the Associated Buffalo Architects for Schools 43 and 45 and the vocational school. At the time the board cancelled its contracts with the architectural firm, the school plans were withheld, the firm claiming rightful possession of them. The price for the three sets of plans will be about \$35,000.

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LOUISVILLE
spiral slide
FIRESCAPE

Are you sure the lives of school children entrusted to your care are protected against fire?

Install a Dow Spiral Slide Firescape and remove the uncertainty — a safe, sure, swift exit for all. Write for details.

THE DOW CO.
300 NORTH BUCHANAN ST.
LOUISVILLE, KY.

Use the Norton Liquid Door Closer with Hold-Open Arms and do away with door stop on bottom of door.



WHY Is The NORTON Closer With Hold-Open Arms the Best Suited for Schoolhouse Work?

1st. The doors are closed with a uniform speed, which gives the pupils a chance to go through a door without getting caught or injured.

2nd. Having two speeds, the speed at the latch can be set for

absolute quiet—no latch necessary.

3rd. The Hold-Open Device connected with the arm of the Door Closer is automatic, a child can operate it—just a push or pull on the door is all there is to do it. Does away with door stop, hook or strap to hold the door open.

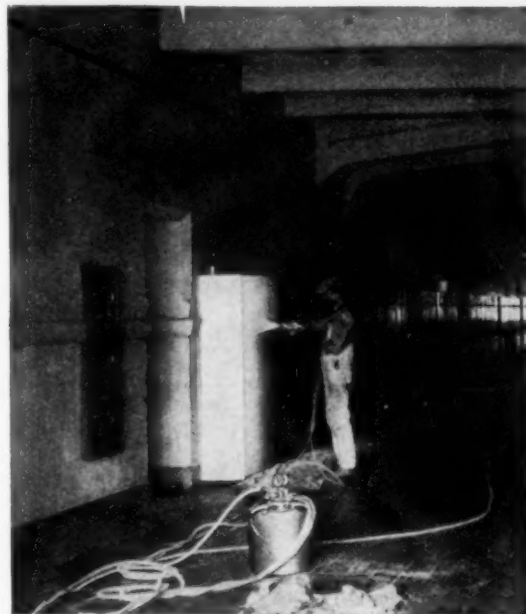
Every school-room should have one.

Service:—We have expert service-men on call, free of charge.

Price:—The price is right. Send for a representative.

THE NORTON DOOR CLOSER CO.

2900-2918 N. Western Avenue,
Chicago, Illinois.



Adaptability is one of the outstanding features of the DeVilbiss Spray-painting System.

Advantages of High Speed and Low Cost Spray-painting

One DeVilbiss spray operator does the work of 4 to 5 brush painters. This high speed of spray-painting not only effects a substantial reduction in labor costs but insures getting your work done in considerably less time.

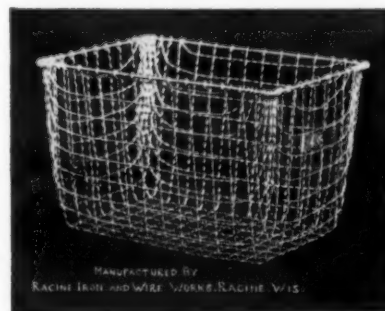
Additional spray-painting advantages are: a more uniform and thorough coating; no spattering and dripping of paint; a coating with the hiding power of two brushed coats; use of less scaffolding.

Get the facts—detailed information will be gladly mailed. Address—THE DEVILBISS MFG. CO., 268 Phillips Ave., TOLEDO, OHIO

DeVilbiss
Spray-painting System

RACINE PRODUCTS FOR SCHOOLS

GYMNASIUM BASKETS and HAND FIRE EXTINGUISHERS



GYM BASKET

Strongly made. Heavily coated with non-rusting material.

FIRE EXTINGUISHER 2 1/2 GALLON SODA AND ACID EXTINGUISHER

Needed in every school building as a fire prevention.

Both items manufactured by

RACINE IRON & WIRE WORKS
RACINE, WISCONSIN



Preserve Your Cement Floors

Palmer's
MULTI-SERVICE
PRODUCTS

Concrete Dressing and Hardener

EASILY APPLIED — TREATMENT NEED NOT BE REPEATED

Do you realize that your
cement floors are wearing just
as surely as wood floors do—
and are throwing off a dust
more dangerous to health?

leaves your cement floors

Flint-hard and permanently Wear-Resisting
Oil and Stain-Proof
Dust-free and Easy to Clean

Have you ever noticed
how porous the average ce-
ment floor is, and how easily
it takes stains and discolor-
ations?

We are
quite sincere
when we state
that you will get
Multi Service from
Palmer Products—
because the patented
features make
them superior.

Let your janitor
tell you how difficult it is
to keep his cement floors
clean and presentable.

Made by the Manufacturer of

Palmer's
COMMERCIAL
PRESERVES

Improved Floor Brushes
Paper Towel Fixtures
Toilet Paper Fixtures
Liquid Soap Dispensers
Blackboard Erasers

and other

Janitor-Sanitary-School Supplies
of Superior Quality

Send for Descriptive Literature and
name of nearby dealer

PALMER Co.

Manufacturers for the Jobber
Milwaukee, U.S.A.

NEW YORK'S NEW RULES ON STUDENTS AND SCHOOL FUNDS.

—New York, N. Y. The special committee appointed to investigate the problem of the collection and expending of school moneys has made its report to the superintendent. In view of the magnitude of the funds raised, and the lack of business methods displayed in the control and disbursement of the same, it is the opinion of the committee that an early adoption of uniform regulations is necessary. The recommendations of the committee, which are given herewith, are to be made the subject of study by the board with a view to the adoption of appropriate bylaws and regulations.

1. That the maintenance of a permanent, continuing school fund, to be known as a General School Fund or General Organization Fund, be permitted in all schools under suitable regulation as to authorization, objects, methods of raising, control of expenditures, and system of accounting.

2. That the raising of money for special school purposes or activities on special occasions, other than through a permanent school fund, be not allowed, except by formal resolution of the Board of Superintendents and of the Board of Education.

3. That section 45, sub-division 17, of the By-laws of 1919 be amended to permit the collection of money in schools from pupils, directly as in the collection of dues, or indirectly as in the charging of admission fees, etc., for the purpose of maintaining in schools a permanent, continuing school fund for school purposes or activities.

4. That authorization for the initiation of a General School Fund or General Organization Fund be obtained by principals upon application to District Superintendent with the approval of Division Superintendents, said authorization to continue throughout the existence of the fund without the necessity of periodic renewal. If at any time a General School Fund should be discontinued, principals should notify District Superintendents, so that there will be at a given time, an official record of the schools maintaining General School Funds.

5. That the objects for which school funds may be maintained be limited to (a) those connected with such school activities as contribute directly to the educational advancement of

pupils; (b) those having to do directly with the physical welfare of pupils; (c) those having to do with the decoration of auditoriums, classrooms and corridors.

6. That any method of raising money for school funds through an obviously commercialized performance or sale, should be forbidden.

7. That motion picture shows as a method of raising money for school funds should be forbidden if held in premises outside of the school building, except with the specific permission of the District Superintendent, after an examination into the character of the picture, time of performance, financial arrangements, etc.

8. That the sale of the products of shops in elementary and prevocational schools should be forbidden, except when prepared and managed in accordance with the following principles: (a) that the educational value involved in the making of any shop product be considered of primary importance; (b) that all money realized through the sale of shop products be deposited with the Auditor of the Board of Education as actual cash; (c) that principals issue regular requisitions upon this money through the Supply Department; (d) that an efficient accounting system be used.

9. That entertainments and bazaars conducted in order to raise money for school funds, be very simple in character, prepared and managed without any encroachment whatsoever upon the school time of supervisors, teachers and pupils.

THE PRIVILEGE OF SERVICE

"There is no reason why we teachers should be treated with any more leniency than any other paid workers. Our service is no less important, our toil no more arduous, our breakdowns no more numerous, our risks no greater. It is an occupation with great opportunities of satisfaction and enjoyment. We live longer; we are better insurance risks than most workers. We have more reason to rejoice than to whine or complain. The majority of us know this. The few loud speaking ones of us who stir up strife and discontent attract more notice than is for the public good. Work in the schools is a privilege, a reason for congratulation."

—William McAndrew, Chicago.

10. That the gross amount of money to be raised in one school year for a general school fund or for any other school purpose, excluding lunch room and shop "turnovers," be limited to 50 cents per capita in elementary schools and \$2 in high schools.

11. That the expenditure of General School or General Organization Funds, for the purpose of decorating school buildings be sanctioned, provided decoration projects are approved by the Board of Superintendents, and are within reasonable financial ability of the school and neighborhood.

12. That no part of any moneys raised by pupils be expended on any item of school building repair or equipment.

13. That no part of any moneys raised by pupils be expended on items of equipment or supplies for classrooms or offices except that such moneys be expended for victrolas, records, stereopticons and slides, in cases in which it can be shown that official supply money has not been allotted for this purpose.

14. That the expenditure of moneys raised by pupils on athletics, clubs, etc., be regarded as proper and commendable.

15. That the expenditure of moneys raised by pupils on legitimate items of public welfare, including scholarships, be regarded as proper and commendable.

16. That the Auditor of the Board of Education be asked to devise a system of accounting (a) for funds of which the annual aggregate is less than \$1,000, and (b) for funds which exceed that amount.

17. That two signatures be required on all checks for disbursements.

18. That all funds exceeding \$1,000 in annual aggregate be audited either by the Auditor of the Board of Education or by a certified public accountant.

19. That detailed semi-annual reports of receipts and expenditures be filed with the District Superintendent in charge.

The problem was studied by a committee of fifteen, and the report, as presented, was prepared by a subcommittee consisting of Dist. Supt. William O'Flaherty, John E. Wade and Director of Reference, Research and Statistics, Eugene A. Nifenecker.

THE BRUNSWICK-BALKE-COLLENDER CO.
WHALE-BONE-ITE
 REG. PAT. OFFICE
CLOSET SEATS

Toilet Seats



No. 21-9
For Extended Lip Bowls



No. 23-9 Ebony
Price \$9.95 Each
packed ready to attach

CUT SHOWS
NO. 23-9 SEAT

D - NOTE CONCEALED HINGE
C - NOTE HEAVY COVERING
B - RUNS LENGTHWISE
A - NOTE THE COUNTER LAYER OF LAMINATION—
THIS RUNS ACROSS SEAT



No. 18-59
For Extended Lip Bowls
No. 18 1/2-59
For Regular Bowls

Other styles at proportionate prices f. o. b. factory

Sanitary Service

Assured
EASIEST CLEANED
 Immediate shipments of all school orders
ORDER NOW!

Urine and excrementious matter causes deterioration, but not in WHALE-BONE-ITE, which is urine and moisture proof.
IT STANDS THE GAFF LIKE A BOWLING BALL

THE MORE IT IS USED
 THE BETTER IT LOOKS
 Hinges are at rear, connected with concealed plate—no metal top or bottom—strong, rigid and fool-proof.

MADE BY

THE BRUNSWICK-BALKE-COLLENDER CO.
 1623 SO. WABASH AVE. CHICAGO

Sold by All
 Leading Jobbers

THE MODERN TREND IN THE SCIENCE OF VENTILATION.

(Continued from Page 52)

A Table of Perfections

The Synthetic Air Chart was adopted five years ago, but it has seen but little practical use for two reasons. One is that it needs

E. Vernon Hill's Table of Recommended Percentages of Ventilation Perfections for Different Classes of Buildings when Tested According to the Synthetic Air Chart

| | New Building Per Cent | Existing Buildings Per Cent |
|--|-----------------------|-----------------------------|
| Schools | | |
| Classrooms | 95 | 90 |
| Manual Training Rooms..... | 90 | 85 |
| Domestic Science Rooms..... | 90 | 85 |
| Assembly Rooms | 90 | 85 |
| Toilet Rooms | 85 | 80 |
| Corridors | 85 | 80 |
| Churches | 85 | 80 |
| Hospitals | | |
| Wards | 95 | 90 |
| Operating Rooms | 95 | 93 |
| Other Rooms | 90 | 85 |
| Theatres | | |
| Seating Sections | 90 | 85 |
| Dressing Rooms, etc..... | 85 | 80 |
| Dance, Lodge and Assembly Halls..... | 85 | 83 |
| Office Buildings | | |
| Offices in office buildings or other buildings where persons are continuously employed | 90 | 85 |
| Factory Buildings | | |

The percentage desirable for factory buildings will vary over a considerable range, depending upon the character of the work and of the process employed, modified to a considerable degree by the dust content of the air and the possibility of maintaining it free from objectionable dust and fumes. This will require a careful classification and considerable study. simplifications and the other is that it has remained as nothing more than a measuring medium by which the percentage of perfection of any existing conditions could be charted and read off or compared with any other so charted set of conditions; but there has been no key to define what percentage of ventilation, as shown by this chart, would be considered good standard practice for any particular building, class of building or other ventilation requirement.

The lack of this key has greatly retarded the establishment of proper ventilation standards. Fortunately, within the past year Dr. Hill has come out with such a key and it is given here as the first practical attempt to define what ventilation standards according to this chart should be maintained for the different requirements of spaces for which ventilation is ordinarily attempted.

Another thing which has materially retarded the establishment of better ventilation is the persistent stand which practically all of our scientists and quite a few of our engineers have maintained against the recommending of any standards covering the preference in methods or apparatus to be used for the production of any predetermined standard of ventilation.

Some Fruitless Controversies

When it was first realized that mechanical ventilation was not satisfactory and that open-air rooms and open-window ventilation appeared to be more satisfactory, a great controversy was started as to whether natural or mechanical ventilation was the better, and as to preferable methods of mechanical ventilation. Later many of those who did not care to enter this controversial field, took the position of trying to define ventilation abstractly without any reference whatever to the method or means of its production.

For a long time, therefore, and up to within the past year the scientists and physicists have maintained the position that certain standards of ventilation should be produced and that there was no practical way of specifying or even suggesting any preferable method of securing these desired results and that the only approved method of procedure was to use whatever method might be thought necessary

and then, if it met the standard, it would be approved; but, if it failed to meet the standard, some other method must be tried. In other words the tendency in this direction was to take a position analogous to that of a doctor who might say that he had no particular method for treating your case but would go ahead with a treatment on the basis that it would be decided from the results produced as to whether or not the treatment was correct, or of the lawyer who might say that he had no particular plan for trying your case; but would go ahead and decide from the results as to whether or not the plan was a good one.

Applied to ventilation this idea, of course, has been proved unsatisfactory for the simple reason that the architect, the engineer, or the owner who wishes to produce a ventilating plant which would be satisfactory for any particular operation, must, before plans and specifications are drawn and before the work is actually installed, know what kind of an apparatus might probably produce the desired results. Evidently, after the apparatus is designed and installed, it is too late to change to some other that might have been better.

The New York State Commission on Ventilation started out in 1914 to establish proper standards of ventilation; but after working for about six years did little more than confirm the already existing opinions, that overheating was one of the greatest evils of artificial ventilation and, that the carbon dioxide content of the air was not the most important index of its quality.

Fortunately Dr. Hill has come to the rescue again this year with another key to this situation and given a table showing the quality of ventilation that may be expected from the sev-

(Continued on Page 125)

WATER
Haas
CLOSETS

Have a Reputation for Endurance

FLUSH
Haas
VALVES



LEFT—

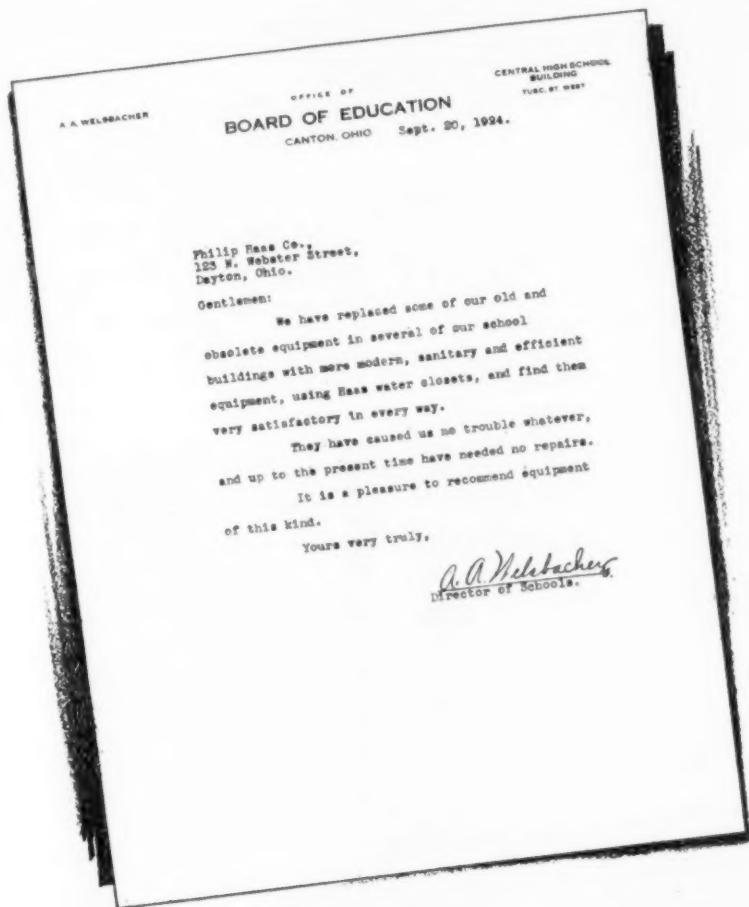
STARK SCHOOL,
CANTON, OHIO.

18 HAAS CLOSETS
INSTALLED IN 1922.

RIGHT—

CHERRY SCHOOL,
CANTON, OHIO.

20 HAAS CLOSETS
INSTALLED IN 1922.



Through years of service in schools and other public institutions, Haas Water Closets and Haas Flush Valves have established for themselves an unquestioned reputation for endurance. Schools throughout the country are installing Haas Equipment for constant trouble-free service.

STRONGER THAN THE STRONGEST GUARANTEE

Haas Flush Valves are stronger than the strongest guarantee. They are built for a lifetime of service. Nothing wears out, but the washers, and even they have in many cases given satisfactory service for fifteen years and more. Haas Flush Valves have no metal-to-metal parts to wear loose and rattle. There are no small ports or needle point adjustments. Haas Flush Valves will deliver a uniform flush at both high and low pressure and have proven their ability to give satisfaction and render indefinite service.

As a mark of confidence, the manufacturers of Haas Flush Valves have established an unqualified guarantee of satisfactory operation for a period of 5 years. They further agree to furnish any and all repair parts found necessary or to replace old valves with new without charge within that period.

We invite you to thoroughly investigate Haas Equipment—the ideal equipment for every public institution.

*Catalogs sent to school officials
and architects on request.*

PHILIP HAAS COMPANY

Established 1896.

DAYTON,

OHIO.





GENERAL OFFICE

Niagara Falls High School, Niagara Falls, N. Y.
Associated Architects of Niagara Falls, N. Y.
E. M. King Elect. Co. of Niagara Falls, N. Y.

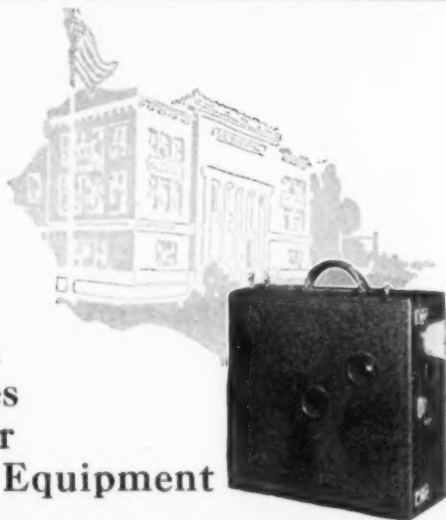
The Niagara Falls Senior High School, one of the finest equipped schools in the country, was recently finished at a cost of \$1,500,000.

A FEDERAL PRIVATE BRANCH EXCHANGE was chosen for inter-communicating purposes. The switchboard is of the sanitary turret desk type with full size typewriter desk. The telephones used were flush wall type and desk type.

There was a REASON for choosing FEDERAL.

Let us tell you more about increasing efficiency in your school.

Federal Telephone Manufacturing Corporation
Buffalo, New York.



**Motion Pictures
Regular
School Equipment**

A few years ago the advocates of motion pictures in school work were considered fadists—today how different!

Motion pictures are now as much a part of the well equipped school as blackboards and textbooks.

It is interesting to know that school boards no longer consider motion picture projectors as an added item of expense, but look at them more as a money saving device, as it has been definitely proved that motion pictures reduce the problem of "repeaters" to a minimum, and from this standpoint alone, actually save their expense many times over in a single year.

Let us send you complete information on the DeVry Projector for your schools.

THE DeVRY CORPORATION,
1109 Center Street, Chicago, Ill.

Gentlemen: Please send me a copy of "Motion Pictures in the School."

Name

School

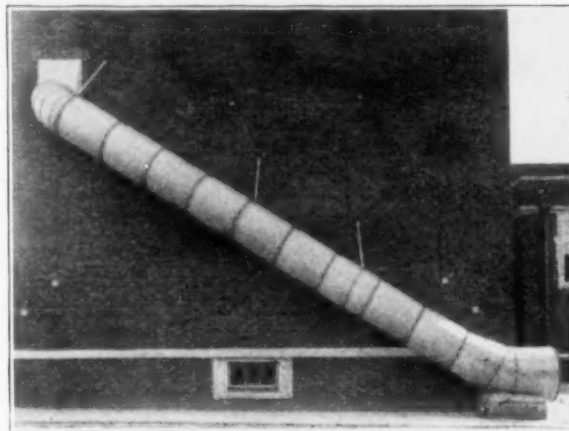
Address

City..... State.....

For Maximum Safety

THE POTTER TUBULAR FIRE ESCAPE

The Only Fire Escape That Is Entered Directly From the Classroom, Eliminating the Hazards of Outside Platforms.



For maximum safety, with minimum expense, equip your schools with Potter Tubular Fire Escapes. The cost of the Potter Tubular Fire Escape completely installed is considerably less than any other sliding type fire escape on the market.

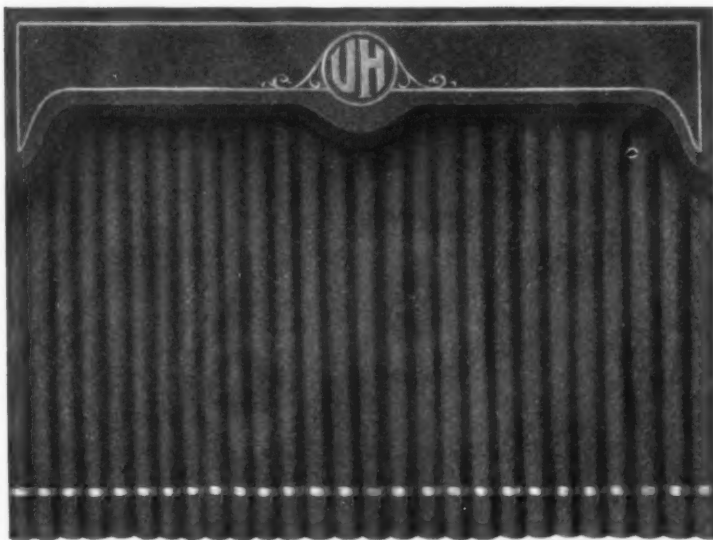
Besides being neat appearing, Potter Tubular Fire Escapes are built of materials that will give many years of service. Smoke, water or flames will not interfere with their use.

We will gladly send you literature describing what FIRE PREVENTION EXPERTS consider the best fire escape known for safeguarding the lives of school children. There is no obligation on your part to make purchase.

*Hundreds of these escapes now in use.
Write for list of installations near you.*

POTTER MANUFACTURING CORP.

1862 Conway Bldg., General Office Chicago, Ill.



Jackson Proscenium Curtain No. 26

Beautiful - Practical - Economical

The stage curtain is the most conspicuous object in the school auditorium. In beauty of fabric and finish our proscenium curtains satisfy the most exacting observer, and their correct construction assures perfect operation.

A. P. JACKSON CORPORATION
HERKIMER, N. Y.

Where "the overhead is low."



SMITH'S IMPROVED PANIC EXIT LOCKS



There can be only One Best of Anything

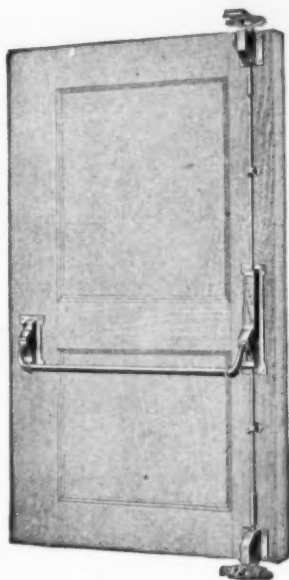
Smith's Improved Exit Locks Are the Best Locks Made for Schools, Theatres, and Industrial Plants

The LEVER Principle

It is the Exit Lock with Lever Action at the Cross-bar to open the Door. There is No Spring Action and no Spring Tension. It is the One Exit Lock of Unfailing Operation, built on Everlasting Principles for Everlasting Service.

The GRAVITY Principle

Our Gravity Exit Lock is the most perfect Mechanical Expression of the Exit Lock Idea that has ever been developed. It is the Exit Lock with Two Locks and without a single Spring in either Lock.



SCHOOL BOARDS

use them because they give the protection wanted.

ARCHITECTS

specify them because they have become the acknowledged standard.

CONTRACTORS

desire them because they are easily installed and do not get out of order.

Now made by

The Steffens - Amberg Co.

HARDWARE MANUFACTURERS

260-268 MORRIS AVENUE

NEWARK, N. J.

Smith's Panic Exit Locks

Smith's Fusible Links

Smith's Sheet Metal Window Hardware

PATENTED AND APPROVED BY THE
NATIONAL BOARD FIRE UNDERWRITERS

(Continued from Page 120)

eral methods of ventilation, generally employed.
This table is given below:

E. VERNON HILL'S SUGGESTED TYPES OF EQUIPMENT FOR DIFFERENT SYNTHETIC AIR CHART PERCENTAGES

The following classification is given to assist the engineer in selecting the type of equipment necessary to comply with certain percentages on the Synthetic Air Chart. It will be understood that considerable variation will be found in a certain class of equipment due to individual ideas on the part of the designer, the character of the installation work, the location of the building in which the equipment is installed, etc., nevertheless, it can be stated that if the equipment is properly designed, installed and operated it will give at least the percentage under the classification. The classification, moreover, is not arbitrary, but based on sound logic, amply sustained by experience.

Competent engineers at the present time do not look upon ventilation problems as dealing with the unknown or mysterious. The relations between temperature, humidity and air motion necessary for comfort have been worked out with a fair degree of accuracy. The necessity for clean air is understood, and its proper distribution is only a matter of good engineering. To design a 100 per cent apparatus, therefore, it is necessary to provide apparatus for heating and humidifying the air, for thoroughly cleaning it, and properly distributing it, with controlling devices that will maintain the temperature and humidity in conformity with the zero equivalent temperature line as given by the Research Laboratory. Any part of the equipment that is omitted and any part that is inefficient will reduce the final percentage in a direct ratio.

Class A—100 Per Cent Equipment. A mechanical supply and exhaust system consisting of the following:

1. Positive air supply having a maximum capacity of 30 c.f.m. per occupant.
2. Mechanical exhaust equipment with exhaust registers effectively located.
3. Perfect air distribution.
4. Accurate automatic temperature control.

5. Efficient humidifying devices.
6. Accurate automatic humidity controlling apparatus.
7. Efficient air washers, filters or other cleaning devices, having an efficiency not less than 99 per cent.

It is understood that a 100 per cent efficient equipment is a physical impossibility owing to the fact that to secure a 100 per cent result would necessarily mean that air cleaning devices be 100 per cent efficient; that temperature and humidity control maintain temperature and humidity conditions absolutely on the comfort curve; that air distribution be perfect, etc. All these results cannot be obtained although a 99 per cent apparatus and an approximately 99 per cent test by the Synthetic Air Chart is possible.

Class B—95 Per Cent Equipment. Mechanical supply system consisting of the following:

1. A positive air supply with a maximum capacity of 30 c.f.m. per occupant.
2. A well designed gravity exhaust system.
3. Efficient air distribution.
4. Accurate temperature control.
5. Adequate humidifying apparatus.
6. Adequate humidity control.

Air cleaning devices have been omitted in the 95 per cent equipment as this percentage can be obtained under ordinary conditions without air washers or filters. In an exceptionally clean locality, much higher percentages can be obtained.

Class C—90 Per Cent Equipment. A mechanical supply system consisting of the following:

1. An adequate air supply with 30 c.f.m. per occupant.
2. Gravity exhaust.
3. Efficient air distribution.
4. Automatic temperature control.
5. Adequate humidifying apparatus.
6. Humidity control in the main duct only or from a typical room.

Class D—85 Per Cent Equipment. A mechanical system consisting of the following:

1. An accurate air supply with a maximum capacity of 30 c.f.m. per occupant.
2. Gravity exhaust or exhaust openings.
3. Good air distribution.
4. Automatic temperature control.

Class E—80 Per Cent Equipment.

1. A positive air supply with gravity exhaust but without air cleaning devices, humidifying apparatus, temperature or humidity control.
2. Direct-indirect systems with either mechanical or gravity exhaust.
3. Open window or other so-called natural systems of ventilation.

Note: Synthetic Air Chart—The final form of the Chart and the text will be revised and comfort based upon the equivalent temperature curve rather than on the wet bulb.

(Concluded in November Journal)

ULTIMATE CAUSES OF UNIVERSITY GROWTH.

(Concluded from Page 49)

transportation, the establishment and standardization of rural high schools everywhere.

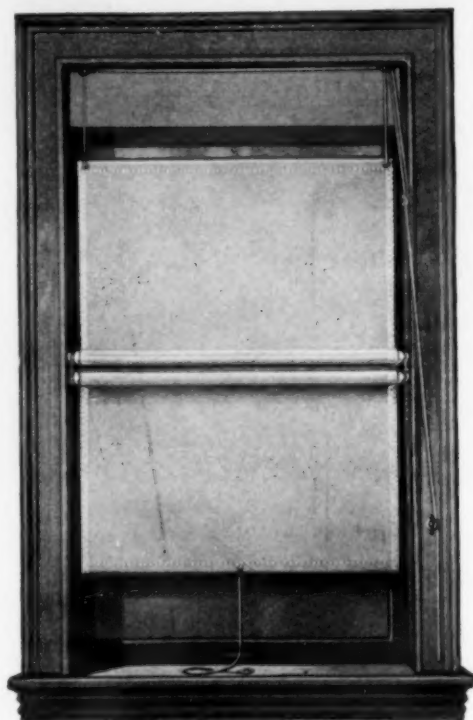
Heavy gains, year by year, throughout the decade have been recorded, greatly accelerated, however, during the last three years, both as to the number of high schools, the number of high school students, and the number of graduates. There is nothing in the present situation to indicate that the acceleration will cease; it is far more likely to continue to gain until all educable individuals of high school age are enrolled in adequate, standardized high schools, trained by effective teachers, and sent out prepared to profit by some type of higher education. Some colleges may choose to be *little* and not *large*; no tax-supported state university has that choice. Democracy's university, like Democracy's high school, is large now, and is destined to grow larger, and still larger. Thus, will it serve the multitudinous requirements of the complex society which maintains it, and the needs of the student body, "heterogeneous as an election day crowd."

ARE POLITICS RUINING OUR SCHOOL SYSTEMS?

(Concluded from Page 48)

we have no recourse except by that indirect and remote means—the vote.

Maxwell's School Shades Save Eyesight and Increase Efficiency



Maxwell's Aranlite Shade mounted inside casing.



MAXWELL'S AIRANLITE DOUBLE ROLL CANVAS SHADES

(Registered U. S. Patent Office)

Are the Best and Give the Greatest Satisfaction

For use in Schools, Offices, Hospitals and public buildings.
Can also be made of any Standard Shade Cloth.
Can be mounted inside or on outside of casing.
Efficient, good looking, economical, trouble-proof and will last for years.
Can be instantly adjusted.

Effective
Durable
Good Looking
Easily Adjusted
Cannot Get Out of Order

Makes possible a proper circulation of air and insures an abundant light distribution.

Fixtures in both drawings are exaggerated in size to show details more clearly.

Can be obtained from leading School Supply Houses.

Write for Circulars.

S. A. MAXWELL & COMPANY
3636 Iron St. Chicago

For service and quality use Maxwell's Dependable Window Shades.

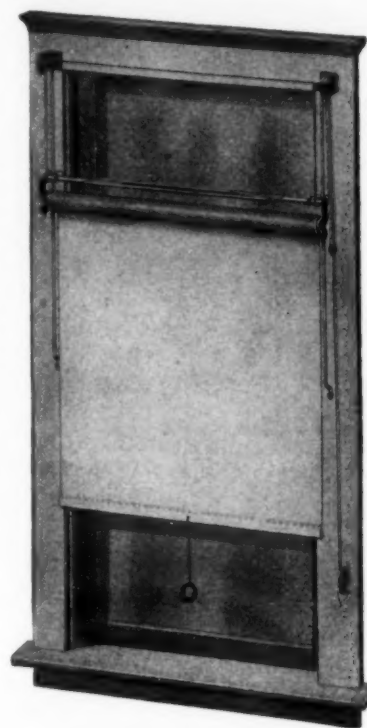
THE "ADJUST-OR" WINDOW SHADE

(Patent Pending)

The most efficient adjustable single shade on the market. Is simple to operate and is effective in regulating light and permitting window ventilation. Operates smoothly and easily. Where a single shade is desired the Adjust-or is the ideal shade. Yields maximum efficiency at a minimum cost.

Can be made of canvas or any standard shade cloth.

Can be mounted inside of casing or on outside of casing or jambs.



The board of education handles and disburses the largest amount of taxes paid into the city treasury for any one purpose. If it decides to buy certain commodities, simply because some member sells it, if it wishes to expend rash sums on campaigns like thrift and health and get no result whatsoever, if it dissipates the budget on gim-cracks and gewgaws for the system, what can we do about it? Just nothing at all.

The only way to take politics out of the school system is for every citizen to lay aside partisan politics, personal obligation, friendship, and prejudice and vote for men whose character and ideals are of the highest.

Do not think for a moment that anything else will suffice. The character of the men at the top will always permeate into every crook and cranny of the system.

How can we judge a man's fitness for public office? By party? Oh, no. It is well known that the same corruption, the same blundering ineffectiveness, the same selfish purposes are in both parties. But, there are ways to judge. For instance, what a man will do in public office can be determined by what he has done in public office. If he has been faithful, honest, and efficient in such positions, he probably will be again. If he has already convicted himself of wrong doing why try him again? But, if he has not served his community in some way, do not let him begin his apprenticeship as an office holder with the position of school director.

Can a man be judged by what people say about him? Not at all. His enemies defame him and his friends extol him. The truth is in neither aspersion nor laudation. But, a man can be judged by the company he keeps. Old Dog Tray discovered that to his sorrow many years ago.

Women often make the mistake of voting for a candidate because he is a good family man. They think because his wife knows where he is every minute in the day, because he is regular in his habits around home, he will make a good public official. This is often untrue. A man may behave himself for purely selfish reasons. He may sit in the amen corner and pray in public because it brings him more business, he may be moral in some ways and immoral in others. We have had such men in office; men who were good husbands and fathers and yet filched the public treasury. And we have had men whose private morals were, perhaps, not so good; but, who made splendid officials.

Is manner indicative of man? Quite so. But, it is well to be wary of the too charming man, the Chesterfield, the one who is generous with his promises and his talk. He is either too anxious to please or too anxious to be rid of you. He has not the slightest intention of keeping his word. But, the man who is not afraid to say no and say it gruffly sometimes, the man who is slow to commit himself and promises little is trustworthy, nine times out of ten.

These ways of judging men are not infallible; because men are changed by prominence and prosperity.

These are but general qualities by which to judge all men for office. There are, however, specific characteristics that should be required of every man who aspires to the office of school trustee:

He should generally have children in school. We are more interested where we are vitally concerned.

He should have some education. How else can he direct education?

He should be patriotic. The citizens of the future are the children of today. Their proper education insures the future of the state.

He should be moderately successful. How can he administer public business if he does not know how to handle public business?

He should be fearless, courageous, and of absolute honesty and integrity. Fearless to stand for what he thinks right, regardless of the combined efforts of his associates or the promptings of politicians. Courageous to attack either publicly or privately any violation of the law by his associates. He should be so honest and honorable that the public would dismiss with a smile any accusation made against him.

—Kenton is listed among the Ohio cities that is free from financial embarrassments. Its affairs are in good shape and all its school plans for next year will be carried out fully. This will include a full time physical director.

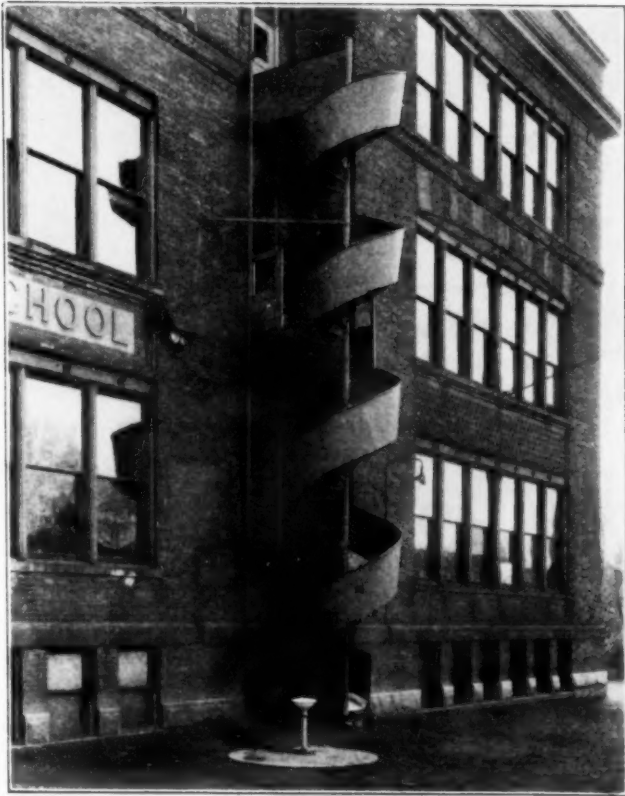
—The board of education of New York which had adopted a budget of \$115,000,000 for 1925 has begun a pruning process whereby it is expected to reduce the same if possible to \$100,000,000.

—When Superintendent Percy M. Hughes notified the city administration of Syracuse, N. Y., that \$60,000 more would be needed for the employment of teachers in the new schools. Mayor Walrath replied: "Superintendent Hughes will have to find a way of raising the money, I know of no way of raising any more money this year."

—Milwaukee, Wis. In the face of objection from one of its members, the school board has adopted the report of its special committee providing for a ten-year school building program to serve as a guide to the board in securing new sites and erecting buildings as needed.

The board has also adopted a resolution providing for the appointment of a committee to define the duties of the statistical agent of the schools.

Why Is A School Board?



Milwaukee School, Milwaukee, Wis.

The physical and mental training of our future citizens is not the only important responsibility of the School Board.

It is the School Board's duty also to look after the safety of the nation's children during school hours.

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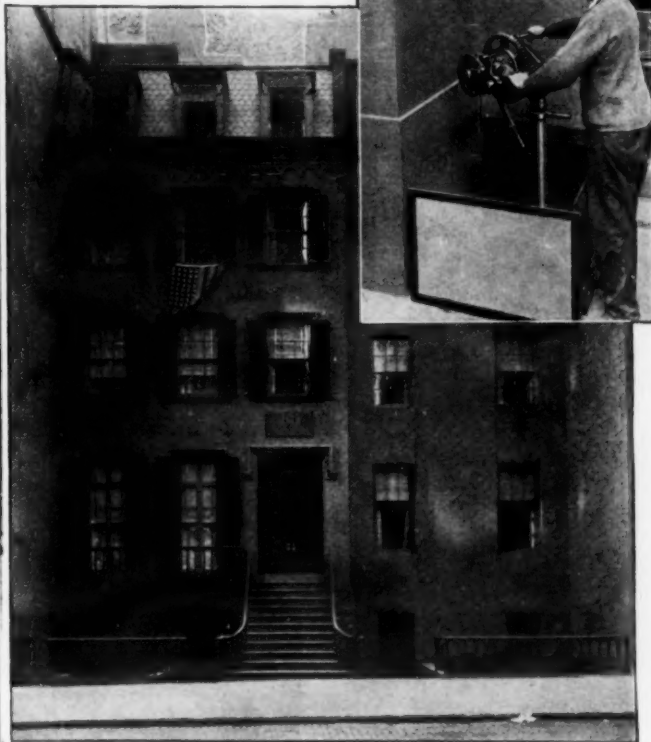
North St. Paul,

Minnesota

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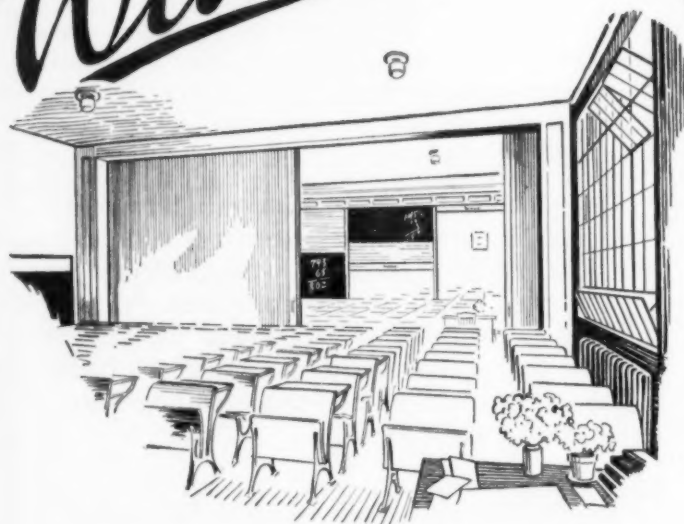
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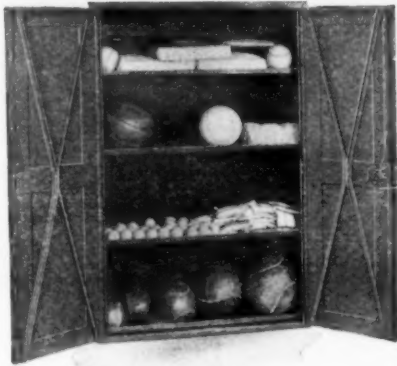
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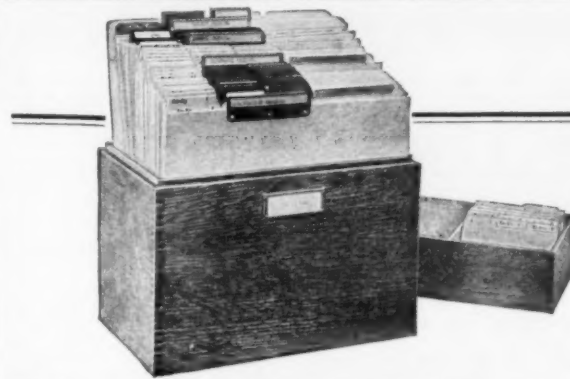
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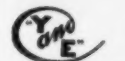
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SCHOOLS AND SUGAR BEETS.

(Concluded from Page 41)

In some districts, schools paid for by the sugar companies and operated by the public school officials, are maintained for four weeks for children of beet growers above the third grade. These children are permitted offered attendance at such summer schools, day for day, in lieu of attendance during the beet harvest.

Strict law enforcement and aggressive, pitiless publicity, are most effective remedies for attendance abuses. Like jumping into cold water, this method fortifies and strengthens, in spite of the first shock.

The social load imposed upon the schools by the sugar beet industry is considerable. Mexicans and other new arrivals, speaking a foreign tongue, call for special attention on playgrounds and in classrooms in the process of assimilation. Progress with the literacy subjects is also complicated and retarded.

As I understand it, the Montana Education Association, through its state officials and through community associations, stands ready to render moral and legal assistance, and to co-operate in every feasible and legitimate manner with county attorneys, juvenile officers, justices of the peace, sheriffs and good citizens generally to prevent harmful child labor and to protect children, taxpayers, and the state from the wastes of irregular attendance.

STATE TAXATION AND SCHOOL SUPPORT.

(Continued from Page 44)

ings located in close proximity, alike in size and appointments, may differ vastly as to their earning value, aside from their selling value. The one may be tenanted and earn a good rental, the other may be vacant and constitute a loss to the owner. Nevertheless the one prop-

erty owner must pay the same tax paid by the other.

This applies to all forms of physical property, whether it be residence, business, or factory property. The location of land and the improvements thereon serve as a guide to valuation, and like location and like improvements result in like valuation.

Thus, it is frequently found that vacant property having no earning power of any kind, nor future speculative or rising value, will eat itself up in taxes. It is not infrequent that the owner of unproductive property has paid in taxes, in addition to the original purchase price, enough to aggregate several times over the value of his holding. The delinquent tax sales of lands by public authorities is common in this country and represents the tremendous losses incurred through a faulty system of taxation.

We must, therefore, hold that the present property tax system, as interpreted and administered in the several states of the nation, is deficient and unsatisfactory; that it not only lacks the qualities for absolute uniformity in administration, but that it is also devoid of the basic principles of equity and fairness. It forms the economic bad lands in our governmental activities. Leading economists are agreed upon this point.

"The general property tax is as destitute of theoretical justification," says Edwin R. A. Seligman, the tax economist, "as it is in practical operation. It is a triple failure from the standpoint of history, theory, and practice. America, the only great, remains deaf to the warnings of history." Thus, the United States is the last of the great countries of the world to cling to the antiquated property tax principle. The countries of Europe have long

recognized the inequities involved in its operation, and shortcomings in its application and service as a revenue producing instrument.

(To Be Concluded)

THE CONFERENCE METHOD.

(Concluded from Page 45)

they will list the factors which are suggested by the respective headings.

As has been stated, the above charts are merely suggestive. Others may be made by the principal and the headings changed to meet the problems with which he has to deal in his particular community. If the members of the conference are supplied with these blanks, which may be mimeographed or printed, the work is facilitated. Further, topics may be assigned to committees and after completion may be presented to the group as a whole where it is studied, criticized and the necessary changes made, if any. A careful record of the findings of the committees should be kept and included in the final report.

It can be readily seen that over a period of time much valuable material will be worked up which will fit into the local situation. It might be stated, however, that this material is most valuable only to those who have participated in the solutions. In other words, it is the "thinking through" of the problems which is valuable, not the reading of what some one else has done.

The report of the conference should contain the findings of the group as a whole, due credit being given to all who participated. It should be divided into sections according to topics and as an introductory statement to each section the purposes, the methods employed, and the reasons for the study should be stated. It should contain a contents sheet and an index in order that it may be efficiently used by those

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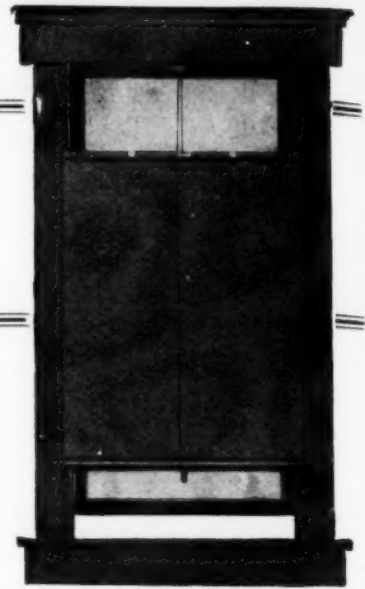
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|---|-------------------------------------|--|-----------------------------------|
| Problems Involved. | Ways and Means of Solving Problems. | Difficulties Likely to be Encountered in the Solution. | How to Overcome the Difficulties. |
| | | | |

ANALYSIS OF INTEREST FACTORS IN DEVELOPING A HIGH SCHOOL PROGRAM.

| Factors. | Effect on School. | How to Bring About Desirable Effects. |
|----------|-------------------|---------------------------------------|
| | | |

ANALYSIS OF LEADERSHIP.

| Qualities of Leadership. | Effects upon School. | How to Bring About Desirable Effects. |
|--------------------------|----------------------|---------------------------------------|
| | | |

ANALYSIS OF SOCIAL ACTIVITIES.

| Kind of Social Activities Permissible. | Effects on School Spirit. | Effects on Community Life. | Difficulties to be Overcome. | Responsibility Points. |
|--|---------------------------|----------------------------|------------------------------|------------------------|
| | | | | |

ANALYSIS OF PROBLEM OF PARENT-SCHOOL COOPERATION.

| Cooperation Points. | Means of Securing Cooperation. | Difficulties to be Overcome. | Means of Overcoming Difficulties. | Responsibility Points. |
|---------------------|--------------------------------|------------------------------|-----------------------------------|------------------------|
| | | | | |

BLANKS USED BY COMMITTEES.

concerned. In this form it serves as a permanent record of achievement, setting forth principles, policies, causes and effects, data, and such other information as will be of benefit for the efficient administration of the school.

In this paper the writer has endeavored to set forth a simple method of conducting faculty meetings on the conference basis. Certain factors are essential if interest and enthusiasm are to be developed, chief among which are active participation, skilful leadership, a definite objective for each meeting, a well defined method of procedure, essential material facilities, and the compilation of the results into a report which will serve as a permanent record of the achievements.

—Superintendent William McAndrew of Chicago, in a number of public addresses, has been taking the people of that city into his confidence regarding the schools. The Chicago Post, in commenting on McAndrews, recently said:

"The superintendent is a man who avoids the spectacular in his speeches, leaving the reporters to supply the pepper. Yet in his conservative manner he painted a most alluring picture of what is ahead for the school system. Special stress is to be laid on the fundamentals of a common school education. Inefficiency in teachers and administrative methods will be eliminated constructively and as rapidly as possible and an attempt will be made during the 200 days a year when the schools function to bring "production" as high as possible. And by production, Mr. McAndrew told his Association of Commerce audience, he meant children properly trained in the fundamentals that lead to success. With that aim in view, the schools are to be run, not for the benefit of the teachers the principals, the school board nor school superintendent, but for the citizenry which pays the taxes and sends its children for instruction.

—In discussing the proposed national child labor legislation, Dr. Henry S. Pritchett holds that, inasmuch as the several states have made reasonable progress in child labor laws, a national constitutional amendment is neither necessary nor desirable.

HIGH SCHOOL SALARIES IN SOUTH DAKOTA.

(Concluded from Page 54)

AVERAGE SALARIES IN SCHOOLS ENROLLING 200 OR MORE

| Year | Teachers | Average Salary | Principals | Average Salary |
|---------|----------|----------------|------------|----------------|
| 1913-14 | 98 | \$ 964 | 7 | \$1679 |
| 1914-15 | 94 | 996 | 6 | 1733 |
| 1915-16 | 94 | 987 | 5 | 1496 |
| 1916-17 | 112 | 1000 | 10 | 1657 |
| 1917-18 | 107 | 1035 | 9 | 1740 |
| 1918-19 | 160 | 1106 | 9 | 2011 |
| 1919-20 | 185 | 1321 | 10 | 2008 |
| 1920-21 | 127 | 1723 | 7 | 2600 |
| 1921-22 | 152 | 1716 | 8 | 2600 |
| 1922-23 | 234 | 1725 | 13 | 2854 |

Per Capita Cost of Instruction

| Year | Average of all Schools | Average for Schools Enrolling 200 or more |
|---------|------------------------|---|
| 1913-14 | \$50 | \$54 |
| 1914-15 | 48 | 55 |
| 1915-16 | 46 | 54 |
| 1916-17 | 44 | 52 |
| 1917-18 | 53 | 53 |
| 1918-19 | 60 | 60 |
| 1919-20 | 70 | 69 |
| 1920-21 | 90 | 77 |
| 1921-22 | 93 | 90 |
| 1922-23 | 91 | 87 |

Salaries Arranged by High School Departments

| Year | Average of all Teachers | Average for Math. | Average for Eng. | Average for Science | Average for Hls. | Average for Lang. |
|---------|-------------------------|-------------------|------------------|---------------------|------------------|-------------------|
| 1913-14 | \$ 732 | \$ 788 | \$ 743 | \$1225 | \$ 855 | \$ 850 |
| 1914-15 | 767 | 833 | 806 | 946 | 820 | 770 |
| 1915-16 | 820 | 926 | 843 | 1078 | 834 | 819 |
| 1916-17 | 831 | 987 | 917 | 1057 | 964 | 826 |
| 1917-18 | 846 | 994 | 890 | 1074 | 964 | 1049 |
| 1918-19 | 959 | | | | | |
| 1919-20 | 1190 | 1183 | 1126 | 1220 | 1273 | 1200 |
| 1920-21 | 1566 | 1550 | 1505 | 1734 | 1576 | 1490 |
| 1921-22 | 1520 | 1570 | 1488 | 1695 | 1600 | 1575 |
| 1922-23 | 1555 | 1579 | 1572 | 1753 | 1647 | 1629 |
| | | Dom. | M. | Nor. | | Ath. |
| Year | Agri. | Science | Trg. | Trg. | Com'l | letics |
| 1913-14 | | \$ 792 | \$ 984 | | \$ 911 | \$ 943 |
| 1914-15 | | 782 | 926 | | 855 | 1025 |
| 1915-16 | | 800 | 931 | | 892 | 856 |
| 1916-17 | | 843 | 1090 | | 908 | 1030 |
| 1917-18 | | 817 | 1116 | | 895 | |
| 1918-19 | | | | | | |
| 1919-20 | | 1060 | 1425 | \$1060 | 1203 | 1223 |
| 1920-21 | \$2323 | 1488 | 1892 | 1675 | 1490 | 1480 |
| 1921-22 | 2387 | 1488 | 1900 | 1509 | 1574 | 1826 |
| 1922-23 | 2400 | 1505 | 1940 | 1674 | 1531 | 1884 |

Note: Blank spaces indicate that there is no data available for those years.

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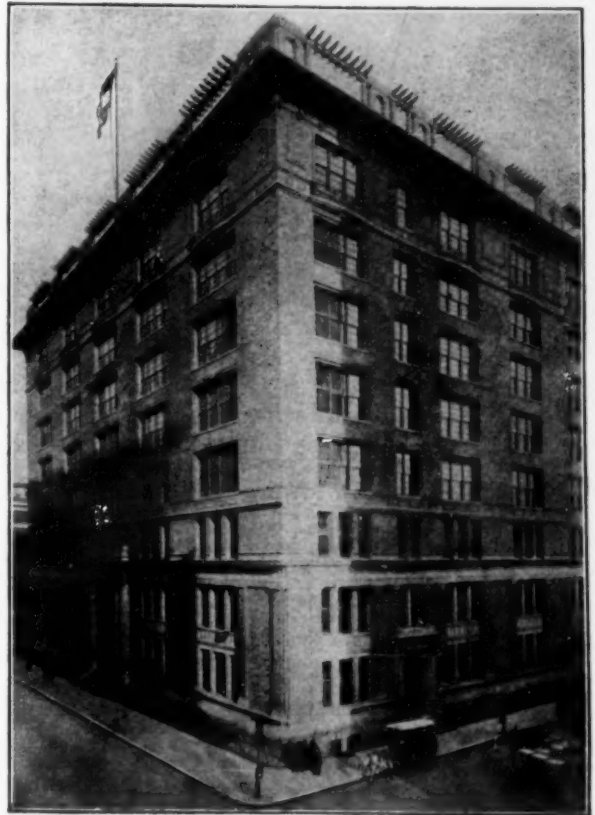
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| West Orange, | N. J., | High School |
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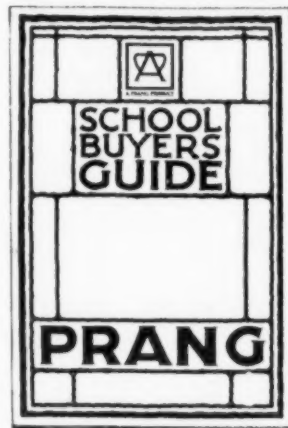
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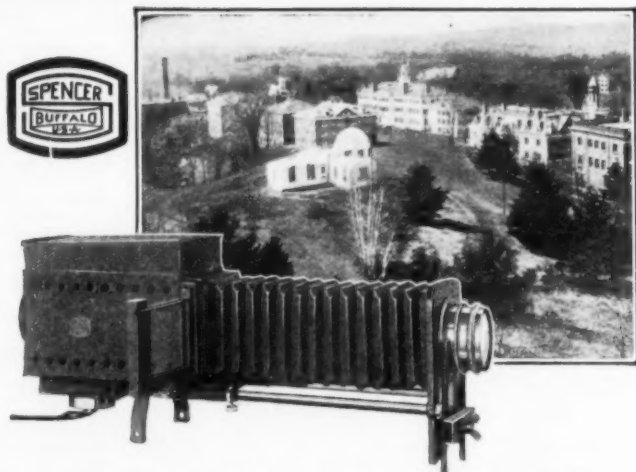
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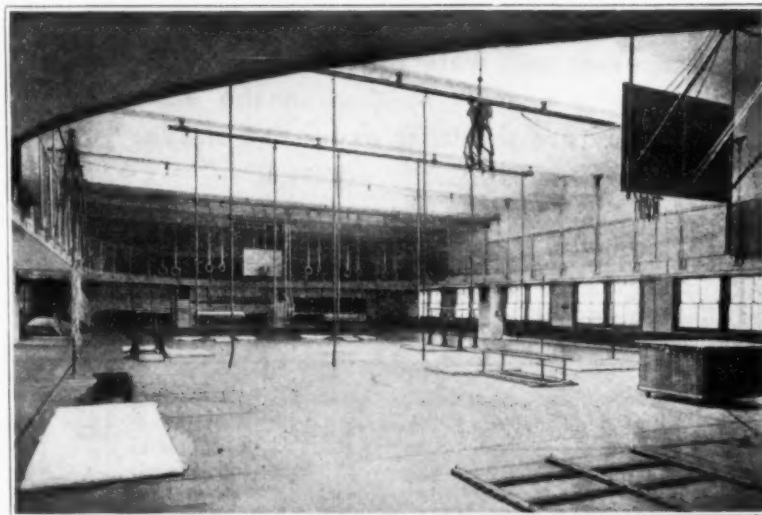
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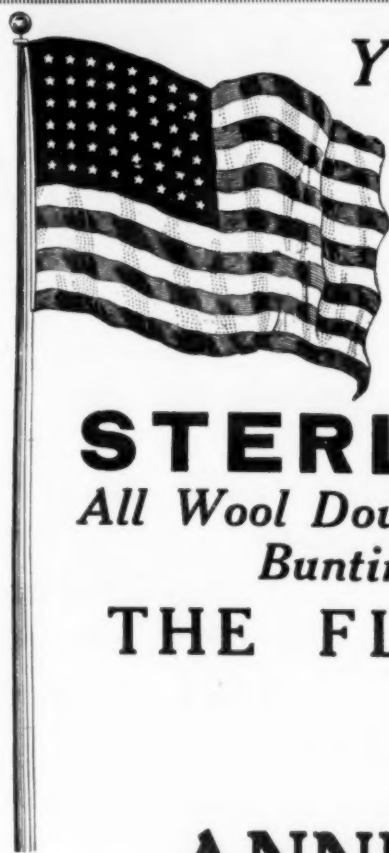
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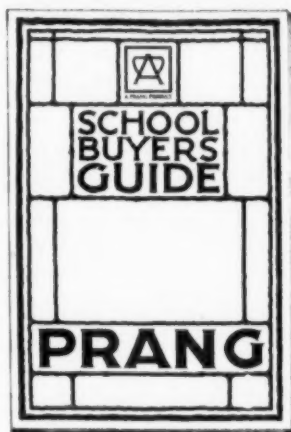
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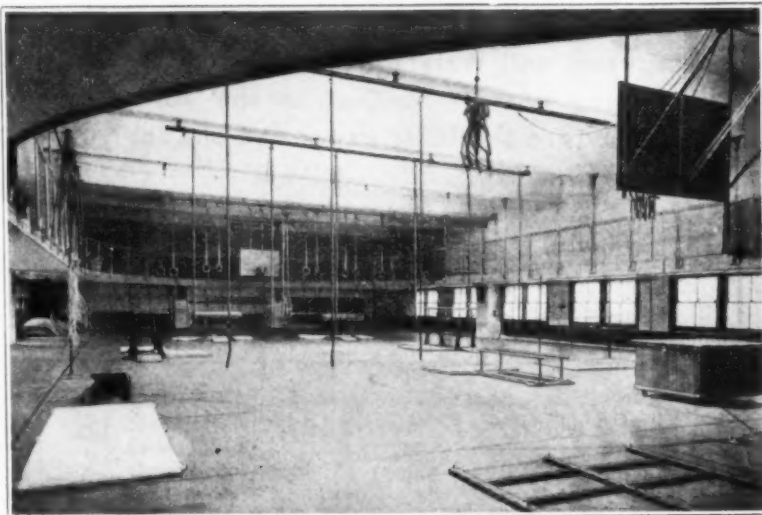
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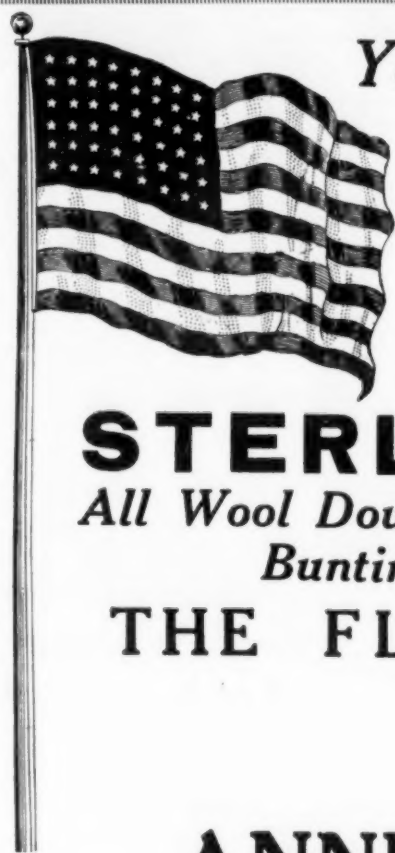
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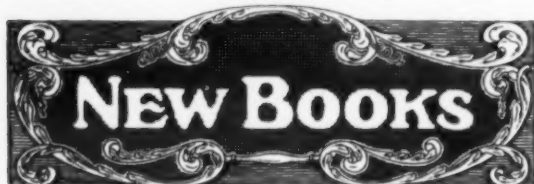
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By Jacob Greenberg. Cloth, 303 pages, 12 mo. Price, \$1.20. Charles E. Merrill Company, New York.

This book is similar to the author's first French book. It includes the uses of the subjunctive, the infinitive, the article, preposition, singular verbs, and the most common idioms, and is intended for the students who have finished the first book and are ready for second and third year high school work.

While the book is primarily a grammar it affords a series of reading lessons, and provides material for oral practice. The author has also introduced a series of illustrations which enhance interest in the subject dealt with.

Cumulative Speller and Shorthand Vocabulary.

By Charles E. Smith. Cloth, 145 pages, price, \$0.75. Isaac Pitman and Sons, New York, N. Y.

This speller addresses itself to stenographers. Each lesson deals with sixteen words, the first twelve of which are respelled phonetically and defined. The shorthand equivalent for each word is supplied. The book is designed to widen the student's range in the use of words. The definition for each is quite complete.

Laboratory Manual

By Carl William Gray and Claude W. Sandifur. Paper, 142 pages, illustrated. Price, \$0.92. Houghton Mifflin Company, Boston, Mass.

This manual has been prepared in aid of the "Fundamentals of Chemistry" prepared by the same authors. Here a series of laboratory experiments are provided. Ample suggestions are also presented and complete directions are given as to the duties of the student in adjusting himself to laboratory labors and customs.

Heroes of the Sea

By Chelsea Fraser, 406 pages, 8 vo., illustrated. Price, \$1.75 net. Thomas Y. Crowell Company, New York.

The author introduces his readers to the men who brave the sea under the most perilous conditions. He tells of the trials of the lighthouse keeper, the adventures of the coast guardsman, the thrills of the whaleman and the seal hunter. Then he spends hours with the submarine sailor, the deep-sea fisherman and the sea-plane pilot.

His stories and descriptions are real. No fiction is indulged in. The reader is brought into touch with the brawny men who have and are still braving the terrors of the sea.

Heating and Ventilating Engineers' Guide.

Cloth, octavo. Price, \$5. The American Society of Heating & Ventilating Engineers. New York City.

This third edition of the yearbook, or guide, of heating and ventilating engineers' society affords a review of the latest technical data available for engineers in the designing and installation of heating and ventilating plants in industrial, institutional, and domestic buildings. For school men the most important section is that devoted to the synthetic air chart which engineers and sanitary experts use in determining the right "comfort" condition of air in rooms. A valuable section of the book is made up of specifications and other information on the leading boilers, fans, etc., in the market.

Stone's Silent Reading

By R. C. Stone and Helen de Werthern. Cloth, 12 mo., 112 pages. Price, 80 cents. Houghton Mifflin Co., Boston, Mass.

While it has been commonly supposed that silent reading can be taught only beginning with the third grade, the present book gives conclusive evidence that the thought and action-provoking advantages of the method can be gained even in the first grade. The present book is a genuine first reader in vocabulary, subject matter, arrangement and illustrations and would serve admirably for oral reading in connection with any basic series. It is, however, far more than a mere oral reader if only the teacher will use it in accordance with the method suggested in the preface. The work is not entirely silent reading as that term is understood later in the school course. It does, however, involve the silent recognition of words, the understanding and carrying out of directions for games and

work, and various child activities common to the school, the playground and the home. The work is graded and leads to the true silent reading.

Laboratory Manual for Biology

John Giesen. Paper, octavo, 215 pages. Price, \$1.80. Bruce Publishing Company.

This book provides an extensive laboratory guide for college biology and covers also the work usually offered for premedical and pre-dental courses in fundamental embryology.

The classic specimens—frog, protozoa, plants, coelenterata; segmented, flat, and round worms; arthropoda, and chordata—are taken up in detail.

The section on embryology uses the chick as the fundamental example.

Comprehensive History Tests

By E. C. Witham. Four tests. Published by the J. L. Hammett Co., Cambridge, Mass.

Tests 1 and 2 are intended for the seventh grade and cover the period from the discovery of America to the first battles of the Revolutionary war. Tests 3 and 4 are intended for the eighth grade and carry the questions along to the end of the Civil war. The tests are of the incomplete sentence type and require supplying one, or at most, two words. They involve crucial happenings only and provide a comprehensive survey of our history.

Introduction to Economics

By Alvin S. Johnson. Revised. Cloth, 480 pages. D. C. Heath & Co., Boston, New York, Chicago.

This book differs from other texts in economics in that it presents a series of principles, stated without undue dogmatic formality, but developed from concrete and practical study of actual economic conditions as they exist in the world of today. The book is thus free from theorizing and speculation and avoids many of those disputed and controversial subjects which mar many textbooks. It will be objected by some teachers that the student will fail to get the relations of economics to social sciences, and that the work outlined does not comprehend definitely many generalizations and fundamental elements of the subject improved by the law of nature, by human conscience, etc. So far as

(Continued on Page 135)

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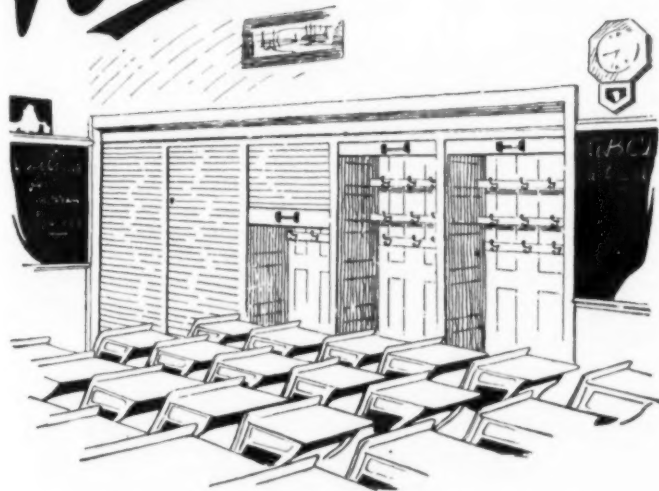
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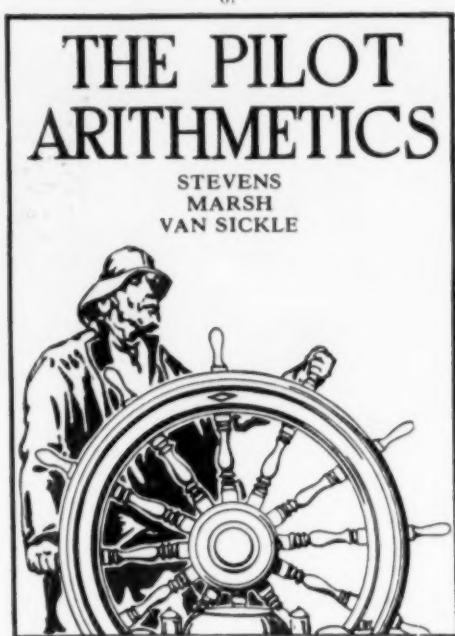
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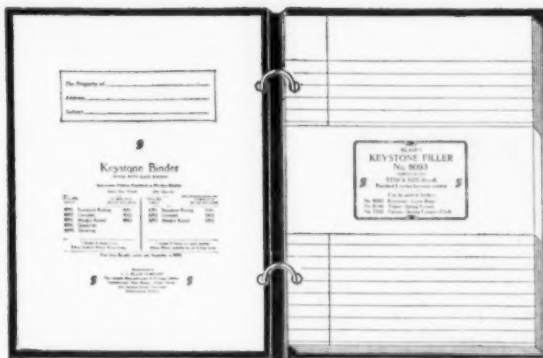
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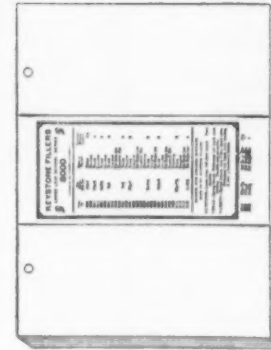
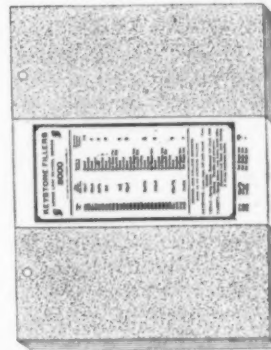
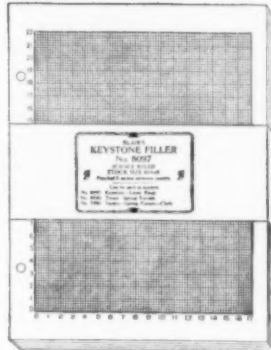
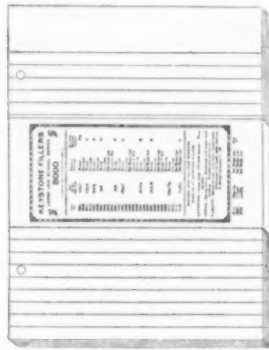
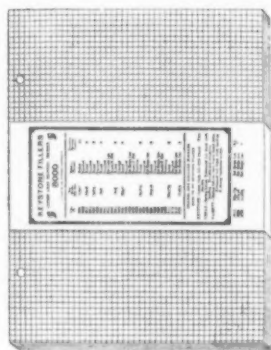
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(Continued from Page 132)

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On Pacific Frontiers

By Capt. Carl Rydell. Cloth, 12 mo., 267 pages. Price, \$1.36. The World Book Co., Yonkers, N. Y.

A sailor's adventures form the subject matter of this interesting book. And this sailor is no fictitious hero of a novelist's brain, but a real man, who tells with utmost simplicity the story of his life from the day when he deserted from the royal Swedish navy until he settled down in Manila as superintendent of the government's nautical school. During 25 crowded years he had ventured all over the Pacific from the Arctic circle to the South Sea islands and from Frisco to Japan—as sailor, seal “pirate,” sea-otter hunter, wrecker, salmon fisher, Alaskan miner. At times storming, frequently heroic, and always picturesque, the author is entirely unaffected and calm in his recital and quite a bit humorous. Boys will thoroughly enjoy the book more than any fiction.

We and Our Health

E. Geo. Payne. Cloth, octavo, 86 pages. American Viewpoint Society, New York.

This is a serious text in health education, which conveys its lessons in informal story form, well illustrated and typographically unlike a school book. The argument for health habits and ideals is introduced in two preliminary chapters in which the health of Indian children and of medieval peoples is described and contrasted with the health and health habits of present-day children and adults. The remaining chapters take up the importance in health of fresh air, exercise, rest, cleanliness, care of the teeth, correct posture, right food, and accident prevention. The purpose and plan of the book are entirely sound, the method and content are a vast advance over the conventional treatment. Supervised Study in the Elementary School

By Alfred Lawrence Hall-Quest. Cloth, 473 pages. The Macmillan Company, New York.

In this book the author has extended his discussion of supervised study in the high school to the elementary school. In the first half of the book he shows how the general plan of class management must be changed and how children

can be taught to study. In the second half specific suggestions are made for applying the method to the teaching of language, arithmetic, the social subjects, and the arts.

Junior High School Mathematics

By Wm. Ledley Vosburgh, Frederick William Gentleman, and Jasper O. Hassler. Revised Edition. Cloth, 255 pages. The Macmillan Co., New York.

Eighth grade work. It provides in part one a review of arithmetic, a study of percentage, simple business problems of the home, the farm, and the city. Part two takes up mensuration of plane and solid geometric figures.

Publicity and the Public School

Clyde R. Miller and Fred Charles. Cloth, 12 mo. Price, \$1.20. Houghton Mifflin Co., Boston, Mass.

The authors of this book—a schoolmaster in charge of the publicity of the Cleveland schools and a newspaper man who has specialized on school news for a large Cleveland daily—summarize the entire philosophy of school publicity in the last paragraph:

“School publicity must have as its only object the telling of the story of education. If it is a good story, true, and interesting, the reader will draw from it those inferences which will win his confidence and enlist his support.”

This book outlines the needs for publicity of a school system in the community which it serves and within the schools themselves. It suggests available media for carrying school news, and shows how these may be used. It defines the term “news” and makes clear the relations of school authorities and the press; it points out many practical methods for getting results and warns against pitfalls. It is but natural that the authors should argue strongly the value of publicity; it is a pity that they do not argue just as heartily against the nuisance of propaganda and the evil “press agenting” into which some school publicity degenerates.

Games, Contests, and Relays

S. C. Staley. Cloth, octavo, 354 pages. Price, \$3. A. S. Barnes Co.

This group of mass physical recreation activities has been collected by an experienced direc-

tor of physical education in his work of directing adult and school classes.

Geography Journeys in Distant Lands

By Harlan H. Barrows and Edith Putnam Parker. Cloth, 152 pages, illustrated. Silver, Burdett & Co., Newark, N. J.

This is the first of a series of four geographies. It deals with geographic journeys into selected countries and is a departure from the regular geographies in that it covers the several countries with greater thoroughness. The illustrations show how mankind lives and works and affords an intimate knowledge of the battle between man and the elements of nature.

In the present volume the student is carried into the Tigris and Euphrates, the Nile, the Congo region, the Mediterranean, Switzerland, the Rhine river and delta lands, also the northlands bordering on the seas.

Applied Business English and Applied Business Correspondence

By Hubert A. Hagar and Rupert P. Sorelle. Cloth, 144 pages. The Gregg Publishing Company, Chicago.

Those who are engaged in the business world know its language. The authors have here devised a book that deals with the grammar that must go with good business English. The lessons cover word studies, modifications of speech, punctuation, capitalization and correspondence.

The text also concerns itself with the common errors that assert themselves in business correspondence, and seeks to obviate them.

All Spanish Method Short Course

By Guillermo Hall. Cloth, 451 pages, illustrated. Price, \$2.40. World Book Co., Yonkers, New York.

The plan of this textbook is to provide the teacher with ample conversation material and to afford drill exercises in sentence construction. Each lesson is attended with a list of questions. Grammar drills are also amply provided.

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(Concluded on Page 137)

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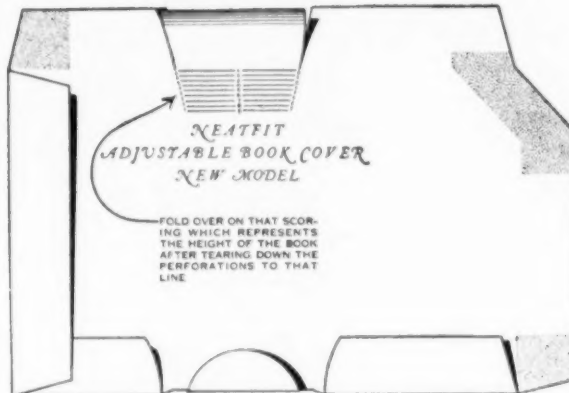
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By Mary E. Boyle. Cloth, 135 pages, illustrated. Price, \$0.85. Little, Brown & Co., Boston.

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Book II by Esther M. Cowan, Annette Betz, W. W. Charters. Cloth, 307 pages, illustrated. Published by Silver, Burdett & Co., New York, Newark, Boston, Chicago.

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Essentials of Economics

By Fred Rogers Fairchild, Ph.D. Cloth, 542 pages. Illustrated. The American Book Company, New York, Chicago, Cincinnati, Boston.

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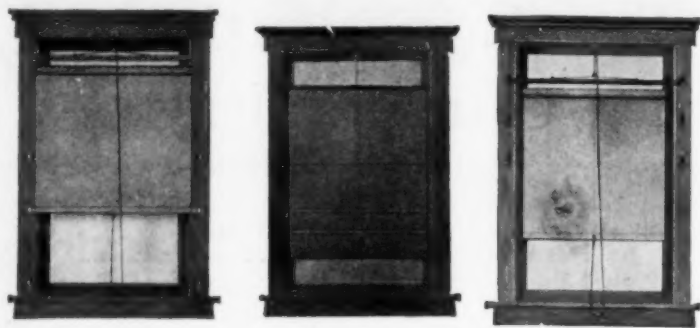
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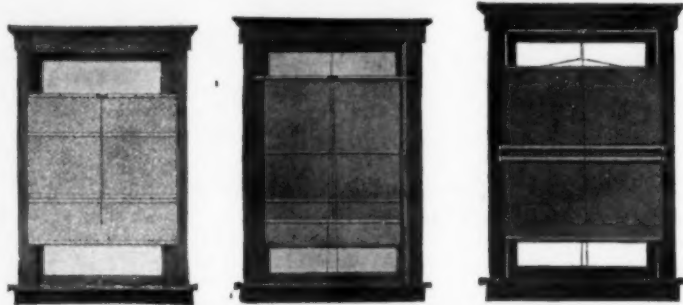
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Our No. 12 or Common Sense Inkwell is made in three sizes, to fit holes 1 1/2", 1 3/4" or 1 7/8". Corks with Caps or Rubber Corks furnished at same price.

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"Anti-Dust" Compressed Crayons



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HYGIENIC, because of their heavy specific gravity, due to our improved process of compression. The particles of the crayon, when erased, drop to the bottom of the blackboard, instead of flying about the schoolroom.

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In round, square and hexagonal shapes.

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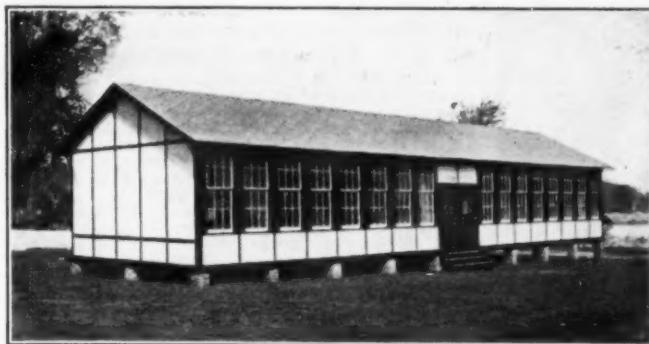
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| NAME | Lock No. | Right | Left | Right |
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| Am. High Sch. | 07145 | 8 | 20 | 21 |
| Am. High Sch. | 04420 | 10 | 23 | 4 |
| Am. High Sch. | 04217 | 9 | 18 | 7 |
| Am. High Sch. | 05145 | 8 | 22 | 17 |
| Am. High Sch. | 07317 | 28 | 3 | 0 |
| Am. High Sch. | 05419 | 4 | 9 | 26 |
| Am. High Sch. | 09378 | 17 | 8 | 20 |
| Am. High Sch. | 08123 | 21 | 12 | 16 |
| Am. High Sch. | 04628 | 16 | 6 | 10 |
| Am. High Sch. | 06317 | 3 | 7 | 11 |
| Am. High Sch. | 08123 | 18 | 6 | 22 |
| Am. High Sch. | 09618 | 7 | 19 | 27 |
| Am. High Sch. | 04248 | 11 | 26 | 4 |
| Am. High Sch. | 05316 | 9 | 14 | 24 |
| Am. High Sch. | 07023 | 23 | 7 | 17 |
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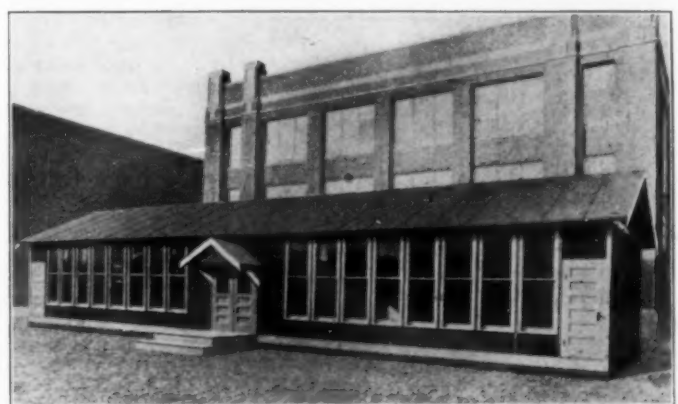
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| 250 Words per minute—5 minutes. | ERRORS |
|---------------------------------|--------|
| 1st—NATHAN BEHRIN..... | 11 |
| 3rd—Charles Swem..... | 16 |
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| 1st NATHAN BEHRIN..... | 5 |
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| | 29 29 |

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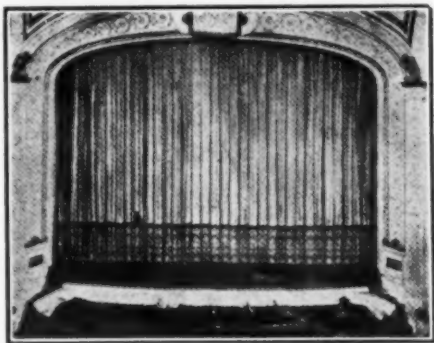
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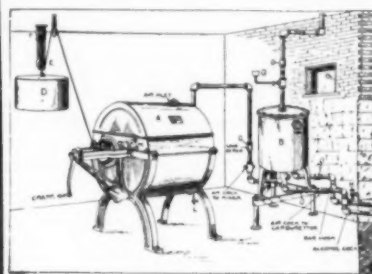


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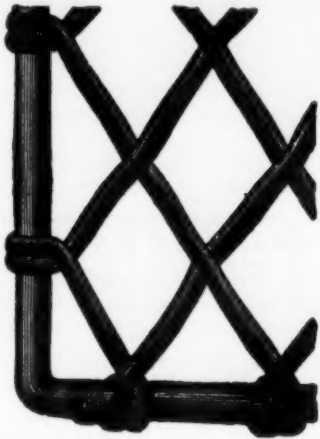
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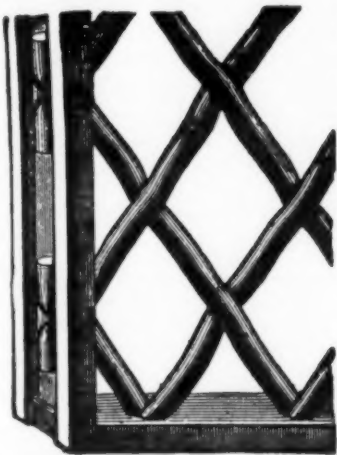
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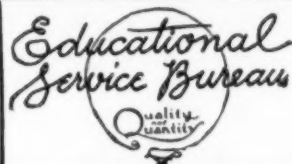
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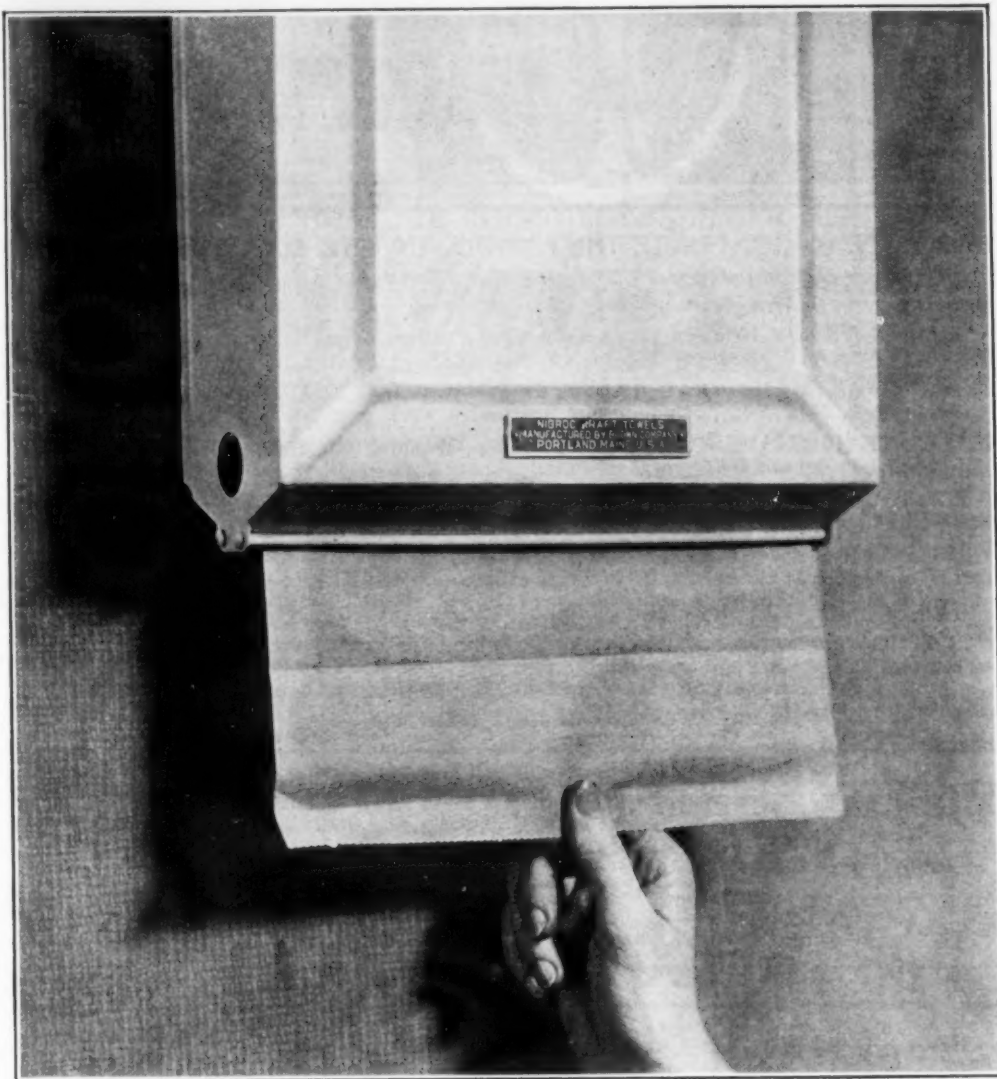
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412 Sycamore St., Cincinnati, O.

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It means a fresh, clean towel for every child. Used once, then thrown

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The manufacturers, Brown Company, Portland, Maine, will be pleased to mail to members of School Boards or of any educational institution a sample pack of Nibroc Towels.

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School Board Journal

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The names given below are those of the leading and most reliable Manufacturers, Publishers and Dealers in the United States. None other can receive a place in this Directory. Everything required in or about a schoolhouse may be secured promptly and at the lowest market price by ordering from these Firms.

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Detroit Steel Products Company

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Milwaukee Corrugating Company

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Sani Products Co., The

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Hansen Manufacturing Company

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Mathews Gas Machine Co.

GAS STOVES

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Our Future Teachers

The following definitions are declared, in a dispatch to the New York Times, to have been presented in an entrance examination by prospective students of the Fond du Lac, (Wis.) County Normal School:

Senator LaFollette—A Frenchman who came to America during the war.
Teapot Dome—An old tomb discovered in Egypt.

Ober-Ammergau—A great German politician.
Herrin—A title used in Germany.
Pinchot—A race horse.
Frances Willard—An American pugilist.
Obregon—A province in Germany.
DeValera—A bandit in Mexico.
Lloyd George—The king of England.
Ford—Ran for president and backed out.
Hellen Kellar—A great airplane flier.
John Wanamaker—A watch-maker.
Mussolini—A region in the southern part of Eurasia.

Tariff—A city in France.
Leonard Wood—An aviator.
Venizelos—A country in South America.
Henry Cabot Lodge—A place where societies meet.

Volstead—An experimenter about laws in physics.

Fiume—A mountain in Japan.
Babe Ruth—World heavy-weight champion.
Muscle Shoals—A great coal mine in Italy.
Firpo—African prizefighter.
Steinmetz—A kind of piano.

Epoch Making

Teacher—Willie, what great change occurred during the World War?

Willie—Pop bought maw a new washboard.

"What is your name?" asked a teacher of a little boy on his first day at a new school.

"Matthew Giles, ma'am," he answered.

"How old are you, Matthew?"

"Six, going on 7."

"I shall have to ask you to bring me a certificate of your age. When you go home ask your mother to write me a note telling me when and where you were born."

After lunch, when the children had reassembled in the schoolroom, Matthew presented himself at her desk, flushed with triumph. The glow soon faded from his face, however, as he felt in his pockets and failed to find the note his mother had written. He began to cry.

"What is the matter?" asked the teacher.

"I've lost my excuse for being born!" sobbed Matthew.—Chicago News.

His Idea of It

Teacher: What is resignation?

Smart Boy: Resignation is when you want something you can't have, and then pretend you never wanted it.

Education by Proxy

Austin: I got 92 in Algebra.

Cedric: Who sits in front of you?

She Got the Job

Very New School Board Member (looking over teaching applications): Let's see—what are Miss Smoof's qualifications,

Chairman: She's the daughter of a cousin of my wife's nephew by a former marriage.

As It Is Spoken

Teacher—"I have went. That's wrong, isn't it?"

Pupil—"Yes, ma'am."

Teacher—"Why is it wrong?"

Pupil—"Because you ain't went yet."

Who Has a Heart?

Jane's class had been given some primary instruction in physiology, which included the heart and its functions.

One day her aunt was preparing cabbage for salad, and, trimming the center down to the edible part, handed it to Jane to eat, explaining that it was the "heart." A few minutes later Jane returned with her doll, and asked:

"Auntie, has dolly got a heart?"

"No, my child, why do you ask?"

"Oh, then just the cabbage and I have hearts?" she asked.—Liberty.

THE NEW GUY

Elizabeth Hart

A new guy came to school today,
A preacher's kid, you know,
He looked like Jacky Coogan does,
And spoke distinct and slow,
And said his sentences correct
From just the very start—
Us fellers had to giggle some,
To hear him talk so smart.

We thought he was a sissy kid,
To wear a sailor suit
In Three-A—but he ain't to blame—
His folks, they think it's cute
To dress him up so babyfied,
And comb his hair so nice;
I hollered "sissy" after school,
Just once, I'll say, not twice.

Another time you bet I'll wait
To size a guy up right,
For—jim-ee-nee—I'll tell the world
That preacher's boy can fight.

When Willie Won.

Young Willie was a born gambler. Many times his schoolmates had to part with their weekly pennies through being foolish enough to bet with him.

As time went on he became quite wealthy in a small way, but his father determined to break him of his gambling habit.

He interviewed the school teacher one day and said:

"I want to cure my boy of his betting habits, so if you can get him to make a bet with you and you are certain he'll lose take him on; then when he loses his money he will be sorry for himself."

The teacher consented. Next day Willie said to him: "I'll bet you a dime you've got corns, sir!"

"Good!" thought the teacher. "I know I haven't, so he's sure to lose." Aloud he said: "All right, Willie, I will bet you I have no corns." And he took off his boots and proved it.

"You've won," said Willie, and paid up.

Next day the teacher met Willie's pa and said:

"Well, I won a dime off your boy. He bet me I had corns and I showed him he was wrong!"

"What!" shouted pa. "Why, the little scamp bet me half a dollar he'd get you to show him your bare feet, and he's won!"—New York Times.

A little boy was out of school for a couple of days and when he went back he said that he had a baby sister and on the way home a boy said to him that he told a lie.

"Well," he said, "if you don't believe me, come along and I will show you the clothes line."

Smiles

"True humor issues not in laughter, but in still smiles, which lie far deeper."—Carlyle.



Superintendent of Sunday School (whose enthusiasm runs towards regular attendance): "Out of the entire school, only one pupil is absent to-day—little Doris Smith—let us hope that she is ill."



TRADE PUBLICATIONS

Colormix Concrete Flooring. The Master Builders' Company of Cleveland, O., has issued a pamphlet describing and illustrating typical uses of Colormix concrete flooring. The material meets the demand for a satisfactory concrete floor in colors. It is at the same time a hardener and waterproofer and may be produced without weakening the tensile or compressive strength of the floor. Colormix contains elements which, while harmless to the cement itself, produces ideal troweling conditions, making it possible to finish the floors in record time. The material may be had in eight different colors—tile red, French grey, battleship grey, linoleum brown, Nile green, buff, white and black.

Information concerning Colormix flooring may be had by addressing the firm at Cleveland.

Issue Supplement to Catalog. The new supplement to the catalog of the Angle Steel Stool Company of Plainwell, Michigan, now ready for distribution, contains sixteen pages of descriptive information on new and varied factory and office equipment in the line of steel stools, chairs, trucks, tables, cabinets, etc.

The items described in this supplement are in addition to the already extensive line of general factory and office equipment as shown in the Company's regular forty page catalog.

Certainly Not His Fairways

"What ruined the ex-Kaiser's chances for victory?" demanded the instructor in Modern European History.

"His bum drives," yelled a golfnut in the next-to-rear row, before the teacher got a chance to answer that one himself.

The Five Missing Snakes

Prof. Louis Agassiz's passion for collecting specimens for study or for the museum often caused him to make unusual uses of his own dwelling. As was common in his day there was only one bath tub in the house, and it was not infrequently occupied by turtles and other animals, aquatic or amphibious. In "A Late Harvest" Dr. Charles W. Eliot tells this amusing anecdote about the professor:

One morning Mrs. Agassiz was just finishing dressing and was putting on one of her boots when she became aware that there was something wriggling inside it. She called to her husband, who was still asleep in the adjoining room, "O Agassiz! Come here; there's a snake in my boot!"

"My dear," the professor replied sleepily, "where can the other five be?"

When Smith's Mind Worked

Smith was a freshman, according to the Youth's Companion, and older than most of his class. He was tall, lanky and slow. His mind, like his body, worked slowly, and the nervous professor in mathematics, after a long and careful explanation, was wont to say:

"Well, Smith, if you will go over that explanation carefully and meditate on it, I think you will understand it. Meditate, Smith, meditate."

So Smith became "Meditate" Smith to his fellow students.

One evening a party of students gathered in the room of one of their number, and Smith was one of them. The meeting was for fun and perhaps mischief, and such a meeting was an infringement of rules.

When the jollity was at its height a warning came that the professor was coming to investigate. The room was cleared at once. Smith as usual was the last, and, hearing steps approaching, he crawled under the bed, seeing no other way of escape. Here he sat doubled up like a jackknife awaiting the event with no little apprehension.

The professor entered, looked about him, saw that the room was empty, then turned to depart. As he closed the door, a thought seemed to strike him; he reentered the room and looked under the bed.

"Hey, Smith, what are you doing there?" he cried.

Smith turned his head with difficulty.

"Meditating, professor."

The professor withdrew.



Bessie Friedman congratulating Albert Tangora on winning the International Silver Trophy, while Minnie Regelmeyer looks on

UNDERWOOD WINS World's Championship Typewriter Contest

*Held under the auspices of the
National Business Show, New York City
October 20, 1924*

FOR the nineteenth consecutive year the World's Typewriter Championship has been won on an Underwood Typewriter, Albert Tangora retaining his title of 1923 in a remarkable exhibition of speed, accuracy, and endurance. Throughout the hour of continuous writing he averaged 130 words per minute and his percentage of accuracy was 99.99%.

Not only was the World's Professional Title won on the Underwood, but *all trophies, all medals in all classes*, were also won by Underwood operators. Proof conclusive of the unquestioned leadership of this—the World's Standard Typewriter.

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Between Safety and Sorrow

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Safe from traffic dangers. Municipal Playground, Bayside Park, Jersey City, N. J.—Anchor Post Fenced.

Out on the roadways sorrow lurks. But carefree youngsters pay but little heed to speeding cars.

At playtime, school children need the protection that an Anchor Post Playground Fence affords.

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Anchor Post Chain Link Fences provide enduring playground protection. To prevent rust, they are heavily galvanized throughout. Their fabric is rust-resisting copper alloy steel wire—galvanized *after weaving* as a double safeguard against corrosion. Posts of steel are *drive-anchored*.

The nearest Anchor Post office or sales agent is at your service.

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International has given them a time system always adequate to today's requirements and always ready for quick adaptation for either change of program as for wider scope of service.

Every school, college or institution so equipped knows the assurance of uninterrupted service, and that it is



The Central Junior High School, Lynn, Mass., designed by the Building Department of the City of Lynn.

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There is no complication of schedule or scope of service which cannot be adequately and economically handled by an International Electric

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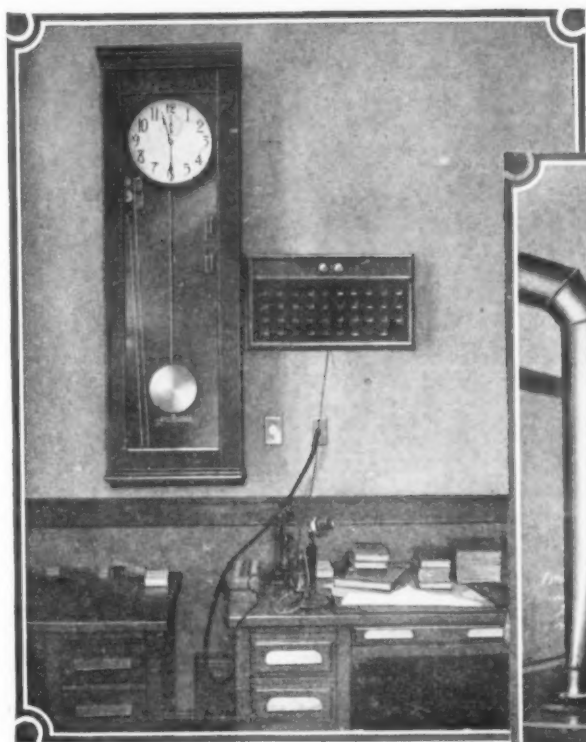
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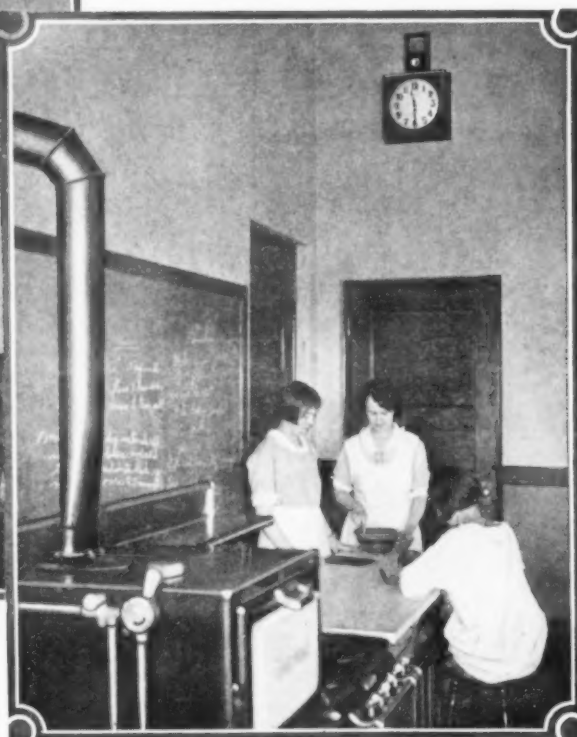
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AT LEFT—Installation in Principal's Office showing Type "E" Master Clock and Four Circuit Program Device. AT RIGHT—In the Domestic Science Classroom, one of the fifty International Secondary Clocks.



When in Atlantic City Visit Our Showrooms at 729 Boardwalk

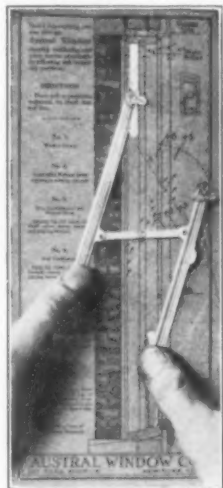
INTERNATIONAL ELECTRIC TIME SYSTEMS

AUSTRAL



This shows Austral Windows opened to different degrees. When opened as shown at the right no direct draft is possible. No shades are shown on these windows.

What Is The Attendance Record In Your School?



This demonstration model shows exactly how Austral Windows operate. Send for one today.

STATISTICS show that in business, the average employee loses 17 days a year through sickness.

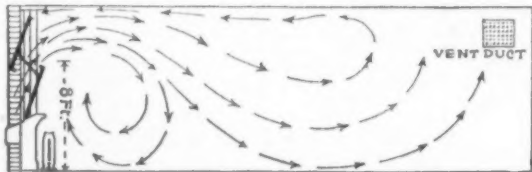
The Department of Hygiene of the St. Louis Public Schools claims that more sickness comes from common colds than from any other reason.

Draughts and poor ventilation are the two great causes of cold.

Austral Windows absolutely overcome both poor ventilation and draughts.

In your school, as we have in thousands all over the country, we can help you fight enforced absence on account of sickness.

How and why, our catalog tells in detail. Send for a copy.



Progress of air in Australized Room. Fresh air enters high enough in room to escape children near windows, while foul air is forced out at top of window.

